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HISTORY

Catalog of
Recent Echinoid Type Specimens
in the
U.S. National Museum
Smithsonian Institution
and the
Museum of Comparative Zoology
Harvard University

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Smithsonian Institution



SMITHSONIAN INSTITUTION PRESS
WASHINGTON, D.C.
1968

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This work forms number 264 of the *Bulletin* series.

Frank A. Taylor
Director, United States National Museum

U S GOVERNMENT PRINTING OFFICE
WASHINGTON : 1968

Catalog of Recent Echinoid Type Specimens in the U.S. National Museum Smithsonian Institution and the Museum of Comparative Zoology Harvard University

By Maureen E. Downey
Smithsonian Institution

Thanks largely to the efforts of Austin H. Clark, late Curator of Echinoderms, the U.S. National Museum has one of the major echinoderm collections in the world. The large and comprehensive collection at the Museum of Comparative Zoology at Harvard achieved its importance mainly through the diligence of Alexander Agassiz and Hubert Lyman Clark. The U.S. Fish Commission deserves the principal credit for the size and scope of these two collections, as many of the specimens in both institutions were collected by the *Albatross*, *Blake*, *Fish Hawk*, and other Fish Commission vessels. The particularly rich fauna of the Pacific yielded many new species, especially from the areas of the Philippine and Hawaiian Islands.

The cataloged echinoid type specimens in the U.S. National Museum comprise 479 lots (about 1,400 specimens), representing 134 nominal species and subspecies of 79 nominal genera. The Museum of Comparative Zoology has 470 cataloged lots of echinoid type specimens, representing 170 nominal species and subspecies of 136 nominal genera. More than half of the specimens in both collections consist of dry material; the rest are preserved in alcohol.

The author has examined and verified every type specimen herein listed. In many cases a holotype was not designated in the original description of a species, and unless the species was based on a single specimen, the material on which the description was based is treated as syntypic, even though one specimen was labeled "holotype." Types subsequently designated, either by the same author or another, are lectotypes. Paratypes are specimens, other than the designated holotype, mentioned in the original publication or material other than the holotype on which the original description was based. Only primary type material is included here; and only types having nomenclatural significance are listed.

The arrangement of the catalog is alphabetical, according to the original name of the genus and species. Types are listed as follows:

Name and author

Reference with date

Catalog number, locality, depth, date collected. Current name, if original name is now a synonym, with a reference, usually to Mortensen's Monograph of the Echinoidea, as this is the latest monographic work giving complete synonymy.

Remarks

The abbreviations USNM and MCZ before the catalog numbers indicate that the specimens are located at the U.S. National Museum or the Museum of Comparative Zoology, respectively.

An index to all the names, generic and specific, original and current, is included. It is hoped that this catalog will prove useful to echinoid workers, as well as to students in the field of echinology.

I wish to express my sincere appreciation for help and advice during the preparation of this catalog to Dr. David L. Pawson, Dr. Frank J. Maturo, Dr. Fenner A. Chace, and others at the U.S. National Museum, and to Professor H. Barraclough Fell and Dr. John Dearborn at the Museum of Comparative Zoology.

Part of this work has been supported by a grant from the Smithsonian Research Foundation.

Type Specimens of Echinoids

Acanthocidaris hastigera A. Agassiz and H. L. Clark

Memoirs of the Museum of Comparative Zoology at Harvard, vol. 34, no. 1, p. 39, pl. 11, figs. 1-5; pl. 12, figs. 1-17; pl. 12b, figs. 18, 19; pls. 37-42, 1907.

Syntypes:

USNM 27364 (1 dry), *Albatross*, Hawaii, 1902 (exact locality not known).

USNM 27365 (4 dry), *Albatross* Sta. 3845, south coast of Molokai, Hawaii, 60-64 fms., Apr. 8, 1902.

USNM 27366 (1 dry), *Albatross* Sta. 4061, northeast coast of Hawaii, 24-82 fms., July 18, 1902.

USNM 27367 (1 dry), *Albatross* Sta. 3838, south coast of Molokai, Hawaii, 92-212 fms., Apr. 4, 1902.

USNM 27368 (2 dry), *Albatross* Sta. 4077, Maui, Hawaii, 99-106 fms., July 21, 1902.

USNM 27369 (1 dry), *Albatross* Sta. 3906, north coast of Molokai, Hawaii, 66-96 fms., May 1, 1902.

USNM 27370 (5 dry), *Albatross* Sta. 4064, northeast coast of Hawaii, 63-107 fms., July 18, 1902.

USNM 27371 (1 dry), *Albatross* Sta. 3846, south coast of Molokai, Hawaii, 60-64 fms., Apr. 8, 1902.

USNM 27399 (9 alcohol), *Albatross* Sta. 4064, see above.

USNM 27462 (1 alcohol), *Albatross* Sta. 3861, off Mokuhooniki, Hawaii, 30-52 fms., Apr. 10, 1902.

USNM 27463 (2 alcohol), *Albatross* Sta. 3846, see above.

MCZ 134 (4 dry), *Albatross* Sta. 4062, northeast coast of Hawaii, 83-113 fms., 1902.

MCZ 344 (3 dry), *Albatross* Sta. 4066, between Hawaii and Maui, 49-176 fms., 1902.

MCZ 346 (3 dry), *Albatross* Sta. 2823, south coast of Molokai, 78-222 fms., 1902.

MCZ 369 (1 alcohol), *Albatross* Sta. 4062, see above.

MCZ 370 (2 alcohol), *Albatross* Sta. 3847, south coast of Molokai, 23-24 fms., 1902.

MCZ 371 (1 alcohol), *Albatross*, Hawaii, 1902 (exact locality not known).

Although no holotype was designated in the original description of this species, the specimen in the U.S. National Museum bearing catalog number 27371 has a label in H. L. Clark's writing indicating that he intended it to be the holotype.

Aceste ovata A. Agassiz and H. L. Clark

Bulletin of the Museum of Comparative Zoology at Harvard, vol. 50, no. 8, p. 258, 1907.

Syntypes:

USNM E854 (1 dry), *Albatross* Sta. 3836, Molokai, Hawaii, 238-255 fms., Apr. 3, 1902.

USNM E852 (2 dry), *Albatross* Sta. 3836, see above.

MCZ 4314 (1 dry), *Albatross* Sta. 3839, Hawaii, off Laeoke Laau Light, 256-266 fms., 1902.

A label with specimen USNM E854 in H. L. Clark's writing indicates that he intended this as the holotype, but as no type was designated in the original description, all above specimens are here treated as syntypes.

Aceste purpurea A. Agassiz and H. L. Clark

Bulletin of the Museum of Comparative Zoology at Harvard, vol. 50, no. 8, p. 259, 1907.

= *Aceste ovata* Agassiz and Clark--see Mortensen's Monograph of the Echinoidea, vol. 5, no. 1, p. 333.

Syntypes:

USNM E855 (fragments, dry), *Albatross* Sta. 4041, off Kawaihae Light, Hawaii, 253-382 fms., July 11, 1902.

MCZ 4313 (1 dry), *Albatross* Sta. 3898, Pailolo Channel, off Mokuhooniki Islet, Hawaii, 258-284 fms., 1902.

Aerope fulva A. Agassiz

Bulletin of the Museum of Comparative Zoology at Harvard, vol. 32, no. 5, p. 81, pl. 8, figs. 5, 6, 1898.

= *Aeropsis fulva* (A. Agassiz)--see Mortensen's Monograph of the Echinoidea, vol. 5, no. 1, p. 329.

Syntypes:

MCZ 2782 (2 dry), *Albatross* Sta. 3361, Panama, between Cocos Island and Mariato Point, 6°10' N., 83°6' W., 1,471 fms., 1891.

MCZ 2783 (3 dry), *Albatross* Sta. 3381, Panama, south of Mariato Point, 4°56' N., 80°53' W., 1891.

MCZ 2784 (2 dry), *Albatross* Sta. 3399, Ecuador, off Galera Point, 1,749 fms., 1891.

Agassizia excentrica A. Agassiz

Bulletin of the Museum of Comparative Zoology at Harvard, vol. 1, p. 276, 1869.

Syntypes:

MCZ 3014 (1 dry), off French Reef, Florida, 45 fms., Pourtales collection.

MCZ 3015 (2 dry), off Tortugas, Florida, 45 fms., Pourtales collection.

Amblypneustes grandis H. L. Clark

Memoirs of the Museum of Comparative Zoology at Harvard, vol. 34, no. 4, p. 329, pl. 121, figs. 4-6, 1912.

Holotype:

MCZ 3298 (dry), Westernport, Victoria, Australia, 2-5 fms., December 1911, J. Gabriel collection.

Paratype:

MCZ 3299 (1 dry), see above.

Amblypneustes pachistus H. L. Clark

Memoirs of the Museum of Comparative Zoology at Harvard, vol. 34, no. 4, p. 327, pl. 194, fig. 6; pl. 112, figs. 10-11; pl. 121, figs. 1-3, 1912.

Holotype:

MCZ 1541 (1 dry), New Zealand (exact locality not known), purchased from B. M. Wright.

Paratypes:

MCZ 1542 (2 dry), Australia.

MCZ 1543 (1 dry), locality unknown.

MCZ 3302 (2 dry), Westernport, Victoria, Australia, December 1911, J. Gabriel collection.

MCZ 3303 (1 alcohol), same as 3302.

MCZ 4726 (4 dry), same as 1541.

Amblypneustes pentagonus A. Agassiz

Bulletin of the Museum of Comparative Zoology at Harvard, vol. 3, p. 56, 1872.

= *Goniopneustes pentagonus* (Agassiz)--see Mortensen's Monograph of the Echinoidea, vol. 3, no. 2, p. 509.

Holotype:

MCZ 1560 (dry), Mauritius?

Amblypneustes triseriatus H. L. Clark

Memoirs of the Museum of Comparative Zoology at Harvard, vol. 34, no. 4, p. 331, pl. 104, fig. 5; pl. 112, fig. 5, 1912.

= *Amblypneustes pachistus* (Clark)--see Mortensen's Monograph of the Echinoidea, vol. 3, no. 2, p. 199.

Holotype:

MCZ 1545 (dry), Australia.

Ammotrophus cyclius H. L. Clark

Records of the South Australian Museum, vol. 3, no. 4, p. 471, 1928.

Paratypes:

MCZ 2021 (3 dry), Encounter Bay, South Australia.

MCZ 3352 (10 dry), Encounter Bay, South Australia.

MCZ 7005 (1 alcohol), Encounter Bay, South Australia.

Anthecinus roseus A. Agassiz

Proceedings of the Academy of Natural Sciences, Philadelphia, p. 358, 1863.

= *Microcyphus maculatus* L. Agassiz--see Mortensen's Monograph of the Echinoidea, vol. 3, no. 2, p. 155.

Holotype:

MCZ 1519 (dry), Ousima, Japan

Apatopygus occidentalis H. L. Clark

Memoirs of the Museum of Comparative Zoology at Harvard, vol. 55, p. 425, pl. 28, fig. 103, 1938.

Holotype:

MCZ 7246 (dry), between Rottnest Island and Freemantle, Western Australia, 10-12 fms., Oct. 20, 1929.

Aporocidaris antarctica Mortensen

Die Echinoiden der Deutschen Sudpolar-Expedition 1901-1903, 113 pp., 10 plates, 1909, p. 25, taf. III, 5, 7; V, 2, 9-11; VII, 4-5; X, 6, 9; XI, 10; XIV, 1, 16; XV, 8, 12-13, 16, 24-28; XVI, 15.

Syntype:

MCZ 2024 (1 dry), Antarctic Ocean, 1,937 fms., Gauss collection.

Aporocidaris fragilis A. Agassiz and H. L. Clark

Memoirs of the Museum of Comparative Zoology at Harvard, vol. 34, no. 1, p. 37, pl. 10, figs. 10-21; pl. 23, figs. 5-8, 1907.

Syntype:

MCZ 348 (1 dry), Albatross Sta. 3783, off Kamchatka, Alaska, 1,567 fms.

Arachnoides tenuis H. L. Clark

Memoirs of the Museum of Comparative Zoology at Harvard, vol. 55, p. 415, pl. 27, figs. 3-4, 1938.

Holotype:

MCZ 7204 (dry), near mouth of Barred Creek, Western Australia, September 1929.

Paratypes:

MCZ 7205 (2 dry), Entrance Point, Broome, Western Australia, 1929.

MCZ 7207 (1 dry), between Broome and Wallol, Western Australia, 8 fms., 1930.

Araeosoma leptaleum A. Agassiz and H. L. Clark

Memoirs of the Museum of Comparative Zoology at Harvard, vol. 34, p. 183, pls. 76-77, 1909.

Holotype:

USNM 27876 (dry), *Albatross* Sta. 4621, Mariato Point, Panama, 6°36' N., 81°45' W., 581 fms., Oct. 21, 1904.

Araeosoma owstoni var. *nudum* Mortensen

Videnskabelige Meddelelser fra den naturhistoriske Forening i Kjobenhavn, bd. 98, p. 164, 1934.

Holotype:

USNM E3290 (alcohol), *Albatross* Sta. 5446, east coast of Luzon, Philippines, 12°43'51"N., 124°59'18" E., 300 fms., June 3, 1909.

Araeosoma parviungulatum Mortensen

Videnskabelige Meddelelser fra den naturhistoriske Forening i Kjobenhavn, bd. 98, p. 164, 1934.

Holotype:

USNM E3292 (dry), *Albatross* Sta. 5645, Buton Strait, Celebes, 5°29'06" S., 122°38' E., 206 fms., Dec. 16, 1909.

Araeosoma paucispinum H. L. Clark

Fisheries and Marine Biological Survey. Union of South Africa, rep. 4, p. 4, pl. 2, 1924.

Paratype:

MCZ 4647 (1 dry), South African Fisheries Board Sta. 373, off Durban, Natal, 212 fms.

Araeosoma tessellatum var. *carinatum* Mortensen

Videnskabelige Meddelelser fra den naturhistoriske Forening i Kjobenhavn, bd. 98, p. 163, 1934.

Holotype:

USNM E3291 (alcohol), *Albatross* Sta. 5290, China Sea, near Luzon, 13°40'09"N., 120°59'30" E., 214 fms., July 22, 1908.

Araeosoma violaceum Mortensen

The Danish *Ingolf*-Expedition, vol. 4, no. 1, p. 176, 1903.

Syntype:

MCZ 4706 (1 dry), *Porcupine* Bank, County Mayo, Ireland, 199 fms.

Aspidodiadema antillarum A. Agassiz

Bulletin of the Museum of Comparative Zoology at Harvard, vol. 8, p. 73, 1880.

= *Plesiadiadema antillarum*--See Mortensen's Monograph, vol. 3, no. 1, p. 27.

Syntypes:

MCZ 595 (1 dry), off Frederickstadt, 451 fms., *Blake* collection.

MCZ 603 (2 dry), south of Cuba, 21°43' N., 76°33' W., 994 fms., *Blake* collection.

MCZ 604 (1 alcohol), off Guadeloupe, 769 fms., *Blake* collection.

MCZ 605 (1 alcohol), off Dominica, 611 fms., *Blake* collection.

MCZ 597 (5 alcohol), off Virgin Islands, 1,097 fms., *Blake* collection.

MCZ 598 (1 alcohol), west of Haiti, 1,200 fms., *Blake* collection.

MCZ 600 (1 alcohol), off Guadeloupe, 734 fms., *Blake* collection.

MCZ 602 (1 alcohol), St. Vincent, 573 fms., *Blake* collection.

Aspidodiadema arcitum Mortensen

Videnskabelige Meddelelser fra den naturhistoriske Forening i Kjobenhavn, bd. 103, p. 547, 1939.

Syntypes:

USNM 27581 (31 alcohol, 1 dry), *Albatross* Sta. 4021, Kauai, Hawaii, 286-399 fms., June 21, 1902.

MCZ 782 (3 dry), *Albatross* Sta. 4021, see above.

Although Mortensen did not indicate a holotype in his description, the dry specimen of USNM 27581 is labeled "type" in his handwriting and undoubtedly is the specimen he intended for the holotype.

Aspidodiadema hawaiiense Mortensen

Videnskabelige Meddelelser fra den naturhistoriske Forening i Kjobenhavn, bd. 193, p. 548, 1936.

Syntypes:

USNM 27587 (23 alcohol), *Albatross* Sta. 3914, Diamond Head, Oahu, Hawaii, 292 fms., May 6, 1902.

Aspidodiadema jacybyi A. Agassiz

Bulletin of the Museum of Comparative Zoology at Harvard, vol. 8, no. 2, p. 74, 1880.

Syntypes:

MCZ 573 (2 dry), off Cayman Brac, West Indies, 297 fms., *Blake* collection.

MCZ 576 (1 dry), off Santiago de Cuba, 288 fms., *Blake* collection.

MCZ 577 (3 dry), off Santa Cruz, 248 fms., *Blake* collection.

MCZ 591 (1 alcohol), off St. Kitts, 245 fms., *Blake* collection.

MCZ 592 (2 alcohol), off St. Kitts., 208 fms., *Blake* collection.

MCZ 593 (1 alcohol), Barbados, 221 fms., *Blake* collection.

MCZ 594 (4 alcohol), off St. Cruz, 248 fms., *Blake* collection.

MCZ 610 (1 alcohol), off St. Vincent, 95 fms., *Blake* collection.

MCZ 613 (1 dry), same as 610.

Aspidodiadema tonsum A. Agassiz

Proceedings of the American Academy of Arts and Sciences, vol. 14, p. 199, 1879.

Syntypes:

MCZ 578 (2 dry), *Challenger* Sta. 209, off Cebu, Philippines, 100 fms.

Asthenosoma bicolor A. Agassiz and H. L. Clark

Bulletin of the Museum of Comparative Zoology at Harvard, vol. 51, no. 5, p. 118, 1907.

= *Araeosoma owstoni* var. *bicolor* (Agassiz and Clark)--see Mortensen's Monograph of the Echinoidea, vol. 2, p. 265.

Holotype:

USNM 27881 (dry), *Albatross* Sta. 4939, Kagoshima Gulf, Japan, 31°18'30"N., 130°42' E., 85 fms., Aug. 16, 1906.

Although Agassiz and Clark originally described this species as *Asthenosoma bicolor* from the single specimen above, they later listed it as *Araeosoma bicolor* in Memoirs of the Museum of Comparative Zoology at Harvard, vol. 34, p. 179, 1909.

Asthenosoma coriacea A. Agassiz

Proceedings of the American Academy of Arts and Sciences, vol. 14, p. 201, 1879.

= *Araeosoma coriaceum* (Agassiz)--see Mortensen's Monograph of the Echinoidea, vol. 2, p. 241.

Syntype:

MCZ 881 (1 dry), *Challenger* Sta. 173, off Tongatabu, 310 fms.

Asthenosoma grubei A. Agassiz

Proceedings of the American Academy of Arts and Sciences, vol. 14, p. 200, 1879.

= *Asthenosoma varium* Grube--see Mortensen's Monograph of the Echinoidea, vol. 2, p. 287.

Syntype:

MCZ 875 (1 dry), *Challenger* collection, Zamboanga, Philippines, 10 fms.

Asthenosoma intermedium H. L. Clark

Memoirs of the Museum of Comparative Zoology at Harvard, vol. 55, p. 378, pl. 26, figs. 2-3, 1938.

Holotype:

MCZ 7094 (dry), reef at Seaforth Island, near Lindeman Island, Barrier Reef, Queensland, Australia, July 1934.

Paratype:

MCZ 7095 (1 dry), same as 7094.

Asthenosoma pellucida A. Agassiz

Proceedings of the American Academy of Arts and Sciences, vol. 14, p. 200, 1879.

= *Hapalosoma pellucidum* (Agassiz)--see Mortensen's Monograph of the Echinoidea, vol. 2, p. 271.

Syntype:

MCZ 895 (1 dry), *Challenger* Sta. 192, near Kei Island, 129 fms.

Asthenosoma pyrochloa A. Agassiz and H. L. Clark

Bulletin of the Museum of Comparative Zoology at Harvard, vol. 51, no. 5, p. 118, 1907.

= *Calveriosoma gracile* (Agassiz)--see Mortensen's Monograph of the Echinoidea, vol. 2, p. 227.

Syntypes:

USNM 27873 (1 dry), *Albatross* Sta. 4919, off Kagoshima Gulf, Japan, 30°34' N., 129°36' E., 440 fms., Aug. 13, 1906.

MCZ 896 (1 dry), *Albatross* Sta. 5086, off Jaka Sima Light, Japan, 292 fms.

The specimen in the U.S. National Museum bears a label in H. L. Clark's writing which indicates that he intended it to be the holotype, although no holotype was designated in the original description. Agassiz and Clark later changed the name of this species from *Asthenosoma pyrochloa* to *Araeosoma pyrochloa* (1909).

Asthenosoma thetidis H. L. Clark

Bulletin of the Museum of Comparative Zoology at Harvard, vol. 52, p. 134, 1909.

= *Araeosoma thetidis* (Clark)--see Mortensen's Monograph of the Echinoidea, vol. 2, p. 267.

Holotype:

MCZ 898 (dry), off Botany Bay, New South Wales, 88 fms.

Paratypes:

MCZ 897 (dry), same as 898.

Astropyga denudata deMeijere

Tijdschrift Nederland Dierk Vereen (2) VIII, p. 4, 1902.

= *Eremopyga denudata* (deMeijere)--see Mortensen's Monograph of the Echinoidea, vol. 3, no. 1, p. 209.

Syntype:

MCZ 685 (1 dry), *Siboga* Sta. 207, Dutch East Indies, 5°7'S., 122°39' E., 82 fms.

Astropyga magnifica A. H. Clark

Journal of the Washington Academy of Science, vol. 24, no. 1, p. 52, 1934.

Holotype:

USNM E3125 (dry), south of Dry Tortugas, Florida, 48 fms., 1933.

Boletia granulata A. Agassiz

Bulletin of the Museum of Comparative Zoology at Harvard, vol. 1, p. 24, 1863.

= *Pseudoboletia indiana* (Michelin)--see Mortensen's Monograph of the Echinoidea, vol. 3, no. 2, p. 529.

Holotype:

MCZ 1567 (dry), Hawaiian Islands, Garrett collection.

Brisaster kerguelenensis H. L. Clark

Memoirs of the Museum of Comparative Zoology at Harvard, vol. 46, no. 2, p. 184, pl. 154, figs. 15-17, 1917.

Holotype:

MCZ 2953 (dry), off London River, Kerguelen, 119 fms., *Challenger* collection.

Brissopsis circosemitta A. Agassiz and H. L. Clark

Bulletin of the Museum of Comparative Zoology at Harvard, vol. 50, no. 8, p. 257, 1907.

= *Brissopsis luzonica* (Gray), see note.

Holotype:

USNM E759 (dry), *Albatross* Sta. 4070, off Puniawa Point, Maui, Hawaii, 45-52 fms., July 19, 1902.

This species was described by Agassiz and Clark in 1907, but by 1917 Clark had decided that it was simply *Brissopsis luzonica*, in which opinion Mortensen concurred in his Monograph.

Brissopsis columbaris A. Agassiz

Bulletin of the Museum of Comparative Zoology at Harvard, vol. 32, p. 82, 1898.

Syntypes:

MCZ 3049 (8 dry), *Albatross* Sta. 3356, off Panama, 7°9'30" N., 81°8'30" W., 546 fms.

MCZ 3050 (1 dry), *Albatross* Sta. 3394, off Panama, 7°21' N., 79°35' W., 511 fms.

MCZ 3252 (7 alcohol), *Albatross* Sta. 3353, Gulf of Panama, 695 fms.

MCZ 4426 (2 alcohol), same as 3050.

Brissopsis micropetala Mortensen

U.S. National Museum Bulletin 100, vol. 14, pt. 3, p. 124, 1948.

Holotype:

USNM E7155 (fragment, alcohol), *Albatross* Sta. 5513, north of Mindanao, 8°16'45" N., 124°02'48" E., 505 fms., Aug. 7, 1909.

Paratypes:

USNM E9341 (1 dry), *Albatross* Sta. 5513, see above.

USNM E9442 (1 dry), *Albatross* Sta., 5424, Cagayan Island, Jolo Sea, 9°37'05" N., 121°12'37" E., 340 fms., Mar. 31, 1909.

USNM E9335 (1 dry), *Albatross* Sta. 5527, Balicasag Island, Philippines, 9°22'30" N., 123°42'40" E., 392 fms., Aug. 11, 1909.

USNM E9433 (1 dry), *Albatross* Sta. 5468, Atulaya Island, Luzon, 13°35'39" N., 123°40'28" E., 569 fms., June 16, 1909.

Brissopsis obliqua Mortensen

U.S. National Museum Bulletin 199, vol. 14, pt. 3, p. 125, 1948.

Holotype:

USNM E7156 (fragments, alcohol), *Albatross* Sta. 5421, between Panay and Guimaras, 10°33'30" N., 122°26' E., 137 fms., Mar. 20, 1909.

Paratype:

USNM E9445 (1 dry), *Albatross* Sta. 5421, see above.

Brissopsis similis Mortensen

U.S. National Museum Bulletin 100, vol. 14, pt. 3, p. 123, 1948.

Holotype:

USNM E7154 (alcohol), *Albatross* Sta. 5201, south of Leyte, Philippines, 10°10' N., 125°04'15" E., 554 fms., Apr. 10, 1908.

Paratype:

USNM E9174 (1 alcohol), *Albatross* Sta. 5529, near Bohol, Philippines, 9°23'45" N., 123°39'30" E., 441 fms., Aug. 11, 1909.

USNM E9236 (2 alcohol), *Albatross* Sta. 5488, Panaon Island, Philippines, 10° N., 125°06' E., 772 fms., July 31, 1909.

USNM E9229 (1 dry), *Albatross* Sta. 5513, north of Mindanao, Philippines, 8°15'45" N., 124°02'48" E., 505 fms., Aug. 7, 1909.

USNM E9242 (1 dry), *Albatross* Sta. 5527, near Bohol, Philippines, 9°22'30" N., 123°42'40" E., 392 fms., Aug. 11, 1909.

USNM E9370 (2 dry), *Albatross* Sta. 5488, see above.

USNM E9380 (3 dry), *Albatross* Sta. 5188, east of Negros, Philippines, 9°44' N., 123°14'20" E., 299 fms., Apr. 1, 1908.

USNM E9429 (1 dry), *Albatross* Sta. 5203, south of Leyte, Philippines, 9°58' N., 125°07'40" E., 775 fms., Apr. 10, 1908.

USNM E9447 (1 dry), *Albatross* Sta. 5529, see above.

USNM E9402 (1 dry), *Albatross* Sta. 5487, Panaon Island, Philippines, 10°02'45" N., 125°05'33" E., 732 fms., July 31, 1909.

Caenopedina annulata Mortensen

U.S. National Museum Bulletin 100, vol. 14, pt. 1, p. 38, 1940.

Holotype:

USNM E9093 (alcohol), *Albatross* Sta. 5617, Ternate Island, Dodinga Bay, Gillolo, 0°49'30" N., 127°25'30" E., 131 fms., Nov. 27, 1909.

Paratype:

USNM E5958 (1 dry), *Albatross* Sta. 5168, Tawi Tawi Group, Jolo (Sulu) Archipelago, 4°56'30" N., 119°45'40" E., 80 fms., Feb. 25, 1908.

Caenopedina capensis H. L. Clark

Annals of the South African Museum, vol. 13, pt. 7, p. 375, pl. 21, figs. 1-2, 1923.

Paratype:

MCZ 4479 (1 dry), Cape Point, Cape Colony, 660-700 fms., *Pieter Faure* 17215.

Caenopedina cubensis A. Agassiz

Bulletin of the Museum of Comparative Zoology at Harvard, vol. 1, p. 256, 1869.

Holotype:

MCZ 1103 (dry), *Blake* Sta. 320, off Havana, Cuba, 270 fms.

Paratypes:

MCZ 2892 (2 dry), SW. of Sand Key, Florida, 138 fms.

Caenopedina diomedae Mortensen

Videnskabelige Meddelelser fra den naturhistoriske Forening i Kjobenhavn, bd. 103, p. 548, 1939.

Holotype:

USNM 21006 (dry), *Albatross* Sta. 3359, off Cape Mala, Gulf of Panama, 6°22'20" N., 81°52' W., 465 fms., Feb. 24, 1891.

Originally identified and cataloged by A. Agassiz as *Podocidaris milleri*.

Caenopedina hawaiiensis H. L. Clark

Memoirs of the Museum of Comparative Zoology at Harvard, vol. 34, no. 4, p. 217, pl. 90, figs. 1-4; pl. 91, figs. 1-13; pl. 105, figs. 1-5, 1912.

Syntypes:

USNM 31187 (1 alcohol), *Albatross* Sta. 3865, Pailolo Channel, between Molokai and Maui, Hawaii, 256-283 fms., Apr. 10, 1902.

USNM 31183 (1 alcohol), *Albatross* Sta. 3879, south of Lanai Island, Hawaii, 923-1,081 fms., Apr. 15, 1902.

USNM 31184 (1 alcohol), *Albatross* Sta. 3914, south coast of Oahu Island, Hawaii, 289-292 fms., May 6, 1902.

USNM 31185 (1 alcohol), *Albatross* Sta. 4178, Niihau Island, 319-378 fms., Aug. 12, 1902.

USNM 31186 (1 alcohol), *Albatross* Sta. 4179, Niihau Island, Hawaii, 378-426 fms., August 12, 1902.

USNM 32845 (1 dry), *Albatross* Sta. 3865, see above.

USNM 32846 (1 dry), *Albatross* Sta. 3865, see above.

MCZ 3907 (1 dry), *Albatross* Sta. 3865, see above.

MCZ 4012 (1 alcohol), same as 3907.

The specimen bearing catalog number USNM 31187 has a label in Clark's writing, which designates it as the holotype, although no holotype was mentioned in the original description.

Calveria fenestratum Wyville-Thomson

Proceedings of the Royal Society of London, vol. 20, p. 494, 1872.

= *Araeosoma fenestratum* (Wyville-Thomson)--see Mortensen's Monograph of the Echinoidea, vol. 2, p. 233.

Syntype:

MCZ 885 (fragment, dry), *Porcupine* collection (no locality).

Centrostephanus asteriscus A. Agassiz and H. L. Clark

Bulletin of the Museum of Comparative Zoology at Harvard, vol. 50, no. 8, p. 237, 1907.

Syntypes:

USNM 27610 (1 alcohol), *Albatross* Sta. 4128, off Hanamaulu, Hawaii, 68-253 fms., Aug. 5, 1902.

USNM 27553 (1 dry), *Albatross* Sta. 4066, southeast of Maui, Hawaii, 49-176 fms., July 18, 1902.

USNM 27554 (1 dry), *Albatross* Sta. 4163, off Modu Manu, Hawaii, 24-40 fms., Aug. 8, 1902.

MCZ 796 (1 dry), *Albatross* Sta. 4161, off Modu Manu, Hawaii, 39-183 fms.

A label on specimen number USNM 27610 indicates that Agassiz and Clark intended this specimen as the holotype, although no holotype was designated in the description.

Centrostephanus rubicingulus H. L. Clark

University of Iowa Studies in Natural History, vol. 9, no. 5, ser. 1, no. 45, p. 103, pls. 1-2, 1921.

Holotype:

USNM E4429 (alcohol), Shoal Bank, Barbados, 25-40 fms., June 13, 1918, Barbados-Antigua Expedition Sta. D.S. 101.

Centrostephanus tenispinus H. L. Clark

Records of the Western Australian Museum, vol. 1, p. 162, pl. 26, 1914.

Syntype:

MCZ 3905 (1 dry), between Freemantle and Geraldton, Western Australia.

Chaetodiadema africanum H. L. Clark

Fisheries and Marine Biological Survey. Union of South Africa, rep. 4, p. 2, pl. 1, 1924.

Paratypes:

MCZ 4651 (1 dry), east from Durban, Natal, 180 fms., South African Fisheries Board Sta. 107.

MCZ 4684 (1 dry), same as 4651.

Chaetodiadema pallidum A. Agassiz and H. L. Clark

Bulletin of the Museum of Comparative Zoology at Harvard, vol. 50, no. 8, p. 237, 1907.

Syntypes:

USNM 27478 (1 dry), *Albatross* Sta. 3957, Laysan Island, Hawaii, 173-220 fms., May 22, 1902.

USNM 27476 (1 dry), *Albatross* Sta. 3857, between Maui and Molokai, Hawaii, 127-128 fms., Apr. 9, 1902.

USNM 27477 (6 dry), *Albatross* Sta. 3957, see above.

MCZ 797 (3 dry), *Albatross* Sta. 4104, Pailolo Channel, Hawaii, 123-141 fms.

MCZ 824 (7 alcohol), same as 797.

MCZ 825 (2 alcohol), *Albatross* Sta. 4103, Pailolo Channel, Hawaii, 132-141 fms.

MCZ 3541 (1 dry), Hawaiian Islands, 173-220 fms., R. T. Jackson collection no. 760.

MCZ 3542 (1 dry), same as 3541.

The nontype specimens in the U.S. National Museum collection undoubtedly belong to the original syntypic series, but as they have somehow been separated from their original labels, they have been left as nontypes.

Chaetodiadema tuberculatum H. L. Clark

Memoirs of the Australian Museum, vol. 4, p. 554, pls. 56-57, 1909.

Syntype:

MCZ 798 (1 dry), *Thetis* Sta. 58, off Wata Mooli, coast of New South Wales, 28-42 fms.

Chondrocidaris gigantea A. Agassiz

Bulletin of the Museum of Comparative Zoology at Harvard, vol. 1, no. 2, p. 18, 1863.

Syntypes:

MCZ 318 (1 dry), Hawaii (exact locality not known).

MCZ 89 (1 alcohol), Hawaii (exact locality not known), Garrett collection.

Cidaris conferta H. L. Clark

Endeavour Echinoderms. Department of Trade and Customs, Fisheries. Sydney, New South Wales, vol. 4, p. 100, pl. 38, figs. 1-4, 1916.
= *Stylocidaris conferta* (Clark)--see Mortensen's Monograph of the Echinoidea, vol. 1, p. 351.

Syntypes:

MCZ 4239 (1 dry), Bass Strait, 80-200 fms., *Endeavour*, 1915.

MCZ 4240 (1 dry), South of Gabo Island, East Victoria, 200 fms., *Endeavour*, 1915.

Cidaris (Cidaris) glandulosa de Meijere

Die Echinoiden der *Siboga* Expedition, p. 13, taf. 1, figs. 5-6, 1904.
= *Prionocidaris glandulosa* (de Meijere)--see Mortensen's Monograph of the Echinoidea, vol. 1, p. 461.

Syntype:

MCZ 754 (1 dry), *Siboga* Sta. 51, west end of Flores, 38-50 fms.

Cidaris (Porocidaris) misakiensis Yoshiwara

Annotations Zoologicae Japonenses, vol. 2, p. 58, 1898.
= *Histocidaris misakiensis* (Yoshiwara)--see Mortensen's Monograph of the Echinoidea, vol. 1, p. 79.

Holotype (part):

MCZ 3903A (1 dry spine), Sagami Bay, Japan, spine from holotype in the Museum of the Imperial University at Tokio.

Cionobrissus revinctus A. Agassiz

Proceedings of the American Academy of Arts and Sciences, vol. 14, p. 206, 1879.

Syntypes:

MCZ 3025 (2 dry), *Challenger* Sta. 191, near Aru Islands, 800 fms.

MCZ 3242 (1 alcohol), same as 3025.

Clypeaster cyclopilus H. L. Clark

Memorias de la Sociedad Cubana de Historia Natural, vol. 15, p. 118, pl. 19, fig. 1, 1941.
= *Clypeaster (Orthanthus) cyclopilus* Clark--see Mortensen's Monograph of the Echinoidea, vol. 4, no. 2, p. 48.

Holotype:

MCZ 7667 (dry), *Atlantis* Sta. 3390, Old Bahama Channel, off west end of Cayo Romano, Cuba, 180 fms., Apr. 27, 1939.

Paratypes:

MCZ 7795 (1 dry), *Atlantis* Sta. 3000, off Bahia Matanzas, Cuba, 255 fms., Mar. 21, 1938

MCZ 7796 (2 dry), *Atlantis* Sta. 3303, off Aayo Baracoa, Cuba, 260 fms., Mar. 23, 1939.

MCZ 7797 (4 dry), *Atlantis* Stas. 3467 & 3478 off Bahiade Matamas, 240 fms., May 11, 1939.

Clypeaster euclastus H. L. Clark

Memorias de la Sociedad Cubana de Historia Natural, vol. 15, p. 120, pl. 10, fig. 2, 1941.

= *Clypeaster (Orthanthus) euclastus* Clark--see Mortensen's Monograph of the Echinoidea, vol. 4, no. 2, p. 45.

Holotype:

MCZ 7668 (dry), *Atlantis* Sta. 3396, old Bahama Channel, off Cayo Coco, Cuba, Apr. 28, 1939.

Paratype:

MCZ 7798 (1 dry), same as 7668.

Clypeaster europacificus H. L. Clark

Memoirs of the Museum of Comparative Zoology at Harvard, vol. 46, no. 1, p. 27, pl. 122, figs. 12-14; pl. 123, figs. 5-10, 1914.

= *Clypeaster (Alexandria) europacificus* Clark--see Mortensen's Monograph of the Echinoidea, vol. 4, no. 2, p. 53.

Holotype:

USNM 34226 (dry), *Albatross* Sta. 2795, Bay of Panama, 7°57' N., 78°55' W., 33 fms., Mar. 5, 1888.

Paratypes:

USNM 34304 (2 alcohol), Bay of Panama, 7°26'10"N., 79°53' W., 56 fms., Mar. 9, 1891.

USNM 34225 (1 dry), *Albatross* Sta. 2813, off Hood Island, Galapagos, 1°21' N., 89°40'15" W., 40 fms., Apr. 7, 1888.

USNM 34224 (1 dry), *Albatross* Sta. 3014, southeast of Tiburon Island, Mexico, 28°28' N., 122°04'30" W., Mar. 23, 1889.

USNM 34223 (3 dry), *Albatross* Sta. 3014, see above.

USNM 34220 (1 dry), *Albatross* Sta. 2795, see above.

USNM 34221 (1 dry), *Albatross* Sta. 2995, southwest of Clarion Island, Mexico, 18°19' N., 116°44'15" W., 31 fms., Mar. 6, 1889.

USNM 34222 (1 dry), *Albatross* Sta. 2829, off Cape San Lucas, Lower California, 22°52' N., 119°55' W., 31 fms., May 1, 1888.

USNM 38179 (3 alcohol), *Albatross* Sta. 2795, see above.

MCZ 4179 (2 dry), *Albatross* Sta. 3014, see above

MCZ 4180 (2 dry), *Albatross* Sta. 2795, see above.

Clypeaster eurychorius H. L. Clark

Fisheries and Marine Biological Survey. Union of South Africa, rep. 4, p. 19, pl. 3, 1924.

= *Clypeaster (Stolonoclypus) eurychorius* Clark--see Mortensen's Monograph of the Echinoidea, vol. 4, no. 2, p. 94.

Paratypes:

MCZ 4669 (2 dry), east-northeast from Durban, Natal, 174 fms., Sta. 138.

Clypeaster lamprus H. L. Clark

Memoirs of the Museum of Comparative Zoology at Harvard, vol. 46, no. 1, p. 42, pl. 122 figs. 1-4; pl. 123, figs. 21-22, 1914.

= *Clypeaster (Stolonoclypus) lamprus* Clark--see Mortensen's Monograph of the Echinoidea, vol. 4, no. 2, p. 116.

Holotype:

MCZ 4739 (dry), *Blake* Sta. 157, off Montserrat, British West Indies, 120 fms.

Paratypes:

MCZ 2162 (2 dry), same as 4739.

Clypeaster leptotracon A. Agassiz and H. L. Clark

Bulletin of the Museum of Comparative Zoology at Harvard, vol. 59, no. 8, p. 248, 1907.

= *Clypeaster (Stolonoclypus) leptotracon* Agassiz and Clark--see Mortensen's Monograph of the Echinoidea, vol. 4, no. 2, p. 126.

Syntypes:

USNM 34262 (1 dry), *Albatross* Sta. 4046, west coast of Hawaii, 71-147 fms., July 11, 1902.

USNM 34259 (1 dry), *Albatross* Sta. 3987, vicinity of Kauai, Hawaii, 50-55 fms., June 11, 1902.

USNM 34260 (13 dry), *Albatross* Sta. 3823, south coast of Molokai, Hawaii, 78-222 fms., Apr. 1, 1902.

USNM 34261 (1 dry), *Albatross* Sta. 4046, see above.

USNM 34268 (10 alcohol), *Albatross* Sta. 3823, see above.

USNM 34269 (2 alcohol), *Albatross* Sta. 4046, see above.

USNM 34270 (14 alcohol), *Albatross* Sta. 4064, northeast coast of Hawaii, 63-107 fms., July 18, 1902.

MCZ 4186 (4 dry), *Albatross* Sta. 4066, off Ka Lee-oka Ilio Point, Hawaii, 49-176 fms.

MCZ 4193 (6 alcohol) same as 4186.

Mortensen regards this species as identical with *Clypeaster (Stolonoclypus) miniaceus*.

Clypeaster lytopetalus A. Agassiz and H. L. Clark

Bulletin of the Museum of Comparative Zoology at Harvard, vol. 50, no. 8, p. 248, 1907.

= *Clypeaster (Rhaphidoclypus) lytopetalus* Agassiz and Clark--see Mortensen's Monograph of the Echinoidea, vol. 4, no. 2, p. 78.

Holotype:

USNM 34207 (dry), *Albatross* Sta. 3962, vicinity of Laysan Island, Hawaii, 16 fms., May 22, 1902.

Paratype:

MCZ 4185 (1 dry), *Albatross* Sta. 3936, off Laysan Island, Hawaii, 79-130 fms.

Mortensen regards this species as identical with *Clypeaster (Rhaphidoclypus) reticulatus*.

Clypeaster ochrus H. L. Clark

Memoirs of the Museum of Comparative Zoology at Harvard, vol. 46 no. 1, p. 39, pl. 141, figs. 1-3, 1914.

= *Clypeaster (Stolonoclypus) ochrus* Clark--see Mortensen's Monograph of the Echinoidea, vol. 4, no. 2, p. 106.

Holotype:

MCZ 4740 (dry), Acapulco, Mexico, *Hassler* collection.

Paratype:

MCZ 2220 (1 dry), Acapulco, Mexico, *Hassler* collection.

Clypeaster pallidus H. L. Clark

Memoirs of the Museum of Comparative Zoology at Harvard, vol. 46, no. 1, p. 25, pl. 122, figs. 16-18; pl. 123, figs. 2-4; pl. 139 figs. 1-3, 1914.

Holotype:

MCZ 2562 (dry), *Blake* Sta. 276, off Barbados, 94 fms.

Paratype:

MCZ 2218 (1 dry), *Blake* Sta. 177, off Dominica, 118 fms.

Clypeaster (Coronanthus) pateriformes Mortensen

U.S. National Museum Bulletin 100, vol. 14, pt. 3, p. 99, 1948.

Holotype:

USNM E7148 (dry), *Albatross* Sta. 5276, Malavatuan Island, Luzon, 13°49'15"N., 120°14'45" E., 18 fms., July 17, 1908,

Clypeaster varispinus de Meijere

Tijdschrift Nederl and Dierk Vereen (2), vol. 8, p. 7, 1902.

= *Clypeaster (Leptoclypus) varispinus* de Meijere--see Mortensen's Monograph of the Echinoidea, vol. 4, no. 2, p. 58.

Syntype:

MCZ 2651 (1 dry), *Siboga* Sta. 51, Madura Bay, Flores, 38-50 fms.

Clypeaster speciosus Verrill

American Journal of Science and Art, vol. 49. p. 95, 1870.

= *Clypeaster (Stolonoclypus) speciosus* Verrill--see Mortensen's Monograph of the Echinoidea, vol. 4, no. 2, p. 103.

Syntypes:

MCZ 2203 (3 dry), La Paz, Mexico (exact locality not known).

Coelopleurus floridanus A. Agassiz

Revision of the Echini, pp. 102, 267, pl. 2c, figs. 14-15, 1872.

Holotype:

MCZ 4718 (spines, dry), off Tennessee Reef, Florida, 160 fms.

Coelopleurus longicollis A. Agassiz and H. L. Clark

Memoirs of the Museum of Comparative Zoology at Harvard, vol. 34, no. 2, p. 89, pl. 49, figs. 29-30, pl. 53, fig. 10, 1908.

Holotype:

MCZ 500 (dry), Basilan Straits, Philippines, 82-102 fms., *Challenger* collection.

MCZ 543 (1 alcohol), same as 500.

Coelopleurus maculatus A. Agassiz and H. L. Clark

Bulletin of the Museum of Comparative Zoology at Harvard, vol. 51, no. 5, p. 116, 1907.

Syntypes:

USNM 27479 (2 dry), *Albatross* Sta. 4937, Kagoshima Gulf, Japan, 31° 13' N., 139° 43' 10" E., 58 fms., Aug. 16, 1906.

USNM 27614 (2 alcohol), *Albatross* Sta. 4937, see above.

MCZ 778 (1 dry), *Albatross* Sta. 4881, eastern channel, Korea Strait, 40-57 fms.

A note in Clark's writing with specimens cataloged USNM 27479 reads "Large one type specimen."

Colobocentrotus stimpsoni A. Agassiz

Memoirs of the Museum of Comparative Zoology at Harvard, vol. 34, no. 1, p. 9, pl. 2, figs. 4-7; pl. 29; pl. 32, figs. 1-4; pls. 33-34; pls. 37-39, figs. 4-5; pl. 40-45, figs. 1-5, 1907.

= *Colobocentrotus mertensii* Brandt--see Mortensen's Monograph of the Echinoidea, vol. 3, no. 3, p. 433.

Type:

USNM 25434 (dry), Bonin Islands, North Pacific Exploring Expedition, 1853-56, collected by William Stimpson.

This may well be the holotype; there is no indication of other type specimens in existence, and no way of knowing from Agassiz's description whether he had one or more specimens. However, the Museum of Comparative Zoology has three specimens from the same locality and same collector labeled *Colobocentrotus mertensii* (1874 and 2136), but they are not marked types. Also some spines from the above USNM specimen are at MCZ.

Conoclypus sigsbei A. Agassiz

Bulletin of the Museum of Comparative Zoology at Harvard, vol. 5, p. 190, pls. 1, 2, 1878.

= *Conolampas sigsbei* (Agassiz)--see Mortensen's Monograph of the Echinoidea, vol. 4, no. 1, p. 303.

Syntype:

MCZ 2752 (1 alcohol), off Havana, Cuba, 175 fms., Sigsbee collection.

Conolampas diomedeeae Mortensen

U.S. National Museum Bulletin 100, vol. 14, pt. 3, p. 95, 1948.

Holotype:

USNM E7147 (dry), *Albatross* Sta. 5261, Mindoro, Philippines, 12°30'55" N., 121°34'24" E., 145 fms., June 4, 1908.

Cystechinus clypeatus A. Agassiz

Proceedings of the American Academy of Arts and Sciences, vol. 14, p. 208, 1879.

= (?) *Urechinus clypeatus* (Agassiz)--see Mortensen's Monograph of the Echinoidea, vol. 5, no. 1, p. 126.

Syntype:

MCZ 2763 (1 dry), *Challenger* Sta. 133, northwest of Tristan da Cunha, 35°41' S., 20°55' W., 1,900 fms.

Cystechinus loveni A. Agassiz

Bulletin of the Museum of Comparative Zoology at Harvard, vol. 32, p. 79, pl. 9, 1898.

= *Urechinus loveni* (Agassiz)--see Mortensen's Monograph of the Echinoidea, vol. 5, no. 1, p. 113.

Syntype:

MCZ 2764 (4 dry), *Albatross* Sta. 3415, southeast of Acapulco, Mexico, 1,879 fms.

Cystechinus rathbuni A. Agassiz

Bulletin of the Museum of Comparative Zoology at Harvard, vol. 32, p. 79, pl. 10, 1898.

= *Pilematechinus rathbuni* (Agassiz)--see Mortensen's Monograph of the Echinoidea, vol. 5, no. 1, p. 117.

Syntypes:

MCZ 2767 (2 dry), *Albatross* Sta. 5374, halfway between Cocos Island and Cape San Francisco, Ecuador, 1,823 fms., 1891.

Dendraster excentricus var. *elongatus* H. L. Clark

Annals and Magazine of Natural History (10), vol. 15, p. 122, 1935.

Holotype:

MCZ 6040 (dry), off Coronados Island, California, 15 fms.

Paratypes:

MCZ 6041 (2 dry), same as 6040.

Dermatodiadema globulosum A. Agassiz

Bulletin of the Museum of Comparative Zoology at Harvard, vol. 32, p. 76, pl. 5 figs. 3-4, 1898.

= *Plesiodiadema globulosum* (Agassiz)--see Mortensen's Monograph of the Echinoidea, vol. 3, no. 1, p. 29.

Syntypes:

MCZ 582 (1 dry), *Albatross* Sta. 3381, north of Malpelo Island, 1,772 fms.

MCZ 583 (3 dry), *Albatross* Sta. 3398, off Galera Point, Ecuador, 1,573 fms.

Dermatodiadema horridum A. Agassiz

Bulletin of the Museum of Comparative Zoology at Harvard, vol. 32, p. 76, pl. 5, figs. 5-7, 1898.

= *Plesiodiadema horridum* (Agassiz)--see Mortensen's Monograph of the Echinoidea, vol. 3, no. 1, p. 31.

Syntypes:

MCZ 584 (6 dry), *Albatross* Sta. 3413, northwest of Culpepper Island, Galapagos, 1,360 fms.

MCZ 585 (3 dry), *Albatross* Sta. 3400, between Galera Point and the Galapagos, 1,322 fms.

MCZ 586 (2 dry), *Albatross* Sta. 3398, off Galera Point, Ecuador, 1,573 fms.

MCZ 587 (6 dry), *Albatross* Sta. 3363, between Cocos Island and mainland, 978 fms.

MCZ 588 (2 dry), *Albatross* Sta. 3362, between Cocos Island and mainland, 1,175 fms.

MCZ 589 (1 dry), *Albatross* Sta. 3361, between Cocos Island and mainland, 902 fms.

MCZ 607 (9 alcohol), same as 585.

MCZ 608 (5 alcohol), same as 587.

Desmechinus anomalus H. L. Clark

Bulletin of the Museum of Comparative Zoology at Harvard, vol. 45, p. 342, 1923.

Holotype:

MCZ 4635 (dry), China Sea (exact locality not known).

Diadema mexicanum A. Agassiz

Bulletin of the Museum of Comparative Zoology at Harvard, vol. 1, p. 29, 1863.

Syntypes:

MCZ 635 (19 dry) Acapulco, Mexico.

Diadema paucispinum A. Agassiz

Bulletin of the Museum of Comparative Zoology at Harvard, vol. 1, p. 19, 1863.

Syntypes:

MCZ 642 (3 dry), Hawaiian Islands, Garrett collection.

Dialithocidaris gemmifera A. Agassiz

Bulletin of the Museum of Comparative Zoology at Harvard, vol. 32, p. 75, pl. 5, figs. 1-2, 1898.

Holotype:

MCZ 573 (dry), Albatross Sta. 3382, off Panama, 1,793 fms.

Dorocidaris bartletti A. Agassiz

Bulletin of the Museum of Comparative Zoology at Harvard, vol. 8, p. 69, 1880.

= *Tretocidaris bartletti* (Agassiz)--see Mortensen's Monograph of the Echinoidea, vol. 1, p. 315.

Syntypes:

MCZ 156 (1 dry), Barbados, 196 fms., *Blake* collection.

MCZ 157 (4 dry), Barbados, 76 fms., *Blake* collection.

MCZ 158 (1 dry), St. Vincent, 95 fms., *Blake* collection.

MCZ 210 (1 alcohol), Martinique, 96 fms., *Blake* collection.

MCZ 212 (2 alcohol), Dominica, 118 fms., *Blake* collection.

MCZ 213 (1 alcohol), Dominica, 118 fms., *Blake* collection.

MCZ 215 (1 alcohol), Martinique, 96 fms., *Blake* collection.

Dorocidaris blakei A. Agassiz

Bulletin of the Museum of Comparative Zoology at Harvard, vol. 5, p. 185, pl. 4, 1878.

= *Cidaris blakei* (Agassiz)--see Mortensen's Monograph of the Echinoidea, vol. 1, p. 307.

Syntypes:

MCZ 179 (1 dry), no locality.

MCZ 202 (1 alcohol), Cuba, 234-450 fms., *Blake* collection.

Dorocidaris bracteata A. Agassiz

Proceedings of the American Academy of Arts and Sciences, vol. 14, p. 198, 1879.

= *Stylocidaris bracteata* (Agassiz)--see Mortensen's Monograph of the Echinoidea vol. 1, p. 359.

Syntype:

MCZ 249 (1 dry), Amboina, 15-35 fms., *Challenger* collection.

Dorocidaris calacantha A. Agassiz and H. L. Clark

Memoirs of the Museum of Comparative Zoology at Harvard, vol. 34, no. 1, p. 13, pl. 4, figs. 1-12; pls. 13 14, 34, 35, 1907.

= *Stylocidaris calacantha* (Agassiz and Clark)--see Mortensen's Monograph of the Echinoidea, vol. 1, p. 359.

Lectotype (Mortensen, *ibid.* p. 356):

USNM 7308 (dry), *Albatross* Sta. 3859, between Molokai and Maui, Hawaii, 138-140 fms., Apr. 9, 1902.

Syntypes:

USNM 27305 (1 dry), *Albatross* Sta. 3885, Pailolo Channel, off Mokuhooniki, Hawaii, 136-148 fms., Apr. 17, 1902.

USNM 27306 (3 dry), *Albatross* Sta. 3863, between Molokai and Maui, Hawaii, 127-154 fms., Apr. 10, 1902.

USNM 27307 (1 dry), *Albatross* Sta. 4045, west coast of Hawaii, 147-198 fms., July 11, 1902.

USNM 27378 (2 alcohol), *Albatross* Sta. 3885, see above.

USNM 27379 (5 alcohol), *Albatross* Sta. 4045, see above.

USNM 27441 (2 alcohol), *Albatross* Sta. 3859, see above.

USNM 27442 (3 alcohol), *Albatross* Sta. 3863, see above.

MCZ 140 (2 dry), *Albatross* Sta. 4100, Pailolo Channel, between Maui and Molokai, Hawaii, 130 fms., July 23, 1902.

MCZ 144 (3 dry), *Albatross* Sta. 3885, see above.

MCZ 57 (1 alcohol), *Albatross* Sta. 3882, Pailolo Channel, between Maui and Molokai, Hawaii, 136 fms., Apr. 16, 1902.

MCZ 58 (1 alcohol), *Albatross* Sta. 3886, same as 3885.

Dorocidaris panamensis A. Agassiz

Bulletin of the Museum of Comparative Zoology at Harvard, vol. 32, p. 73, pls. 1, 2, 1898.

= *Hesperocidaris panamensis* (Agassiz)--see Mortensen's Monograph of the Echinoidea, vol. 1 p. 416.

Syntypes:

MCZ 327 (4 dry), *Albatross* Sta. 3368, off Panama, 66 fms., Feb. 28, 1891.

MCZ 328 (1 dry), *Albatross* Sta. 3367, off Panama, 100 fms., Feb. 28, 1891.

MCZ 58 (2 alcohol), *Albatross* Sta. 3378, off Panama, 112 fms., Mar. 5, 1891.

Dorocidaris rugosa H. L. Clark

Bulletin of the Museum of Comparative Zoology at Harvard, vol. 51, no. 7, p. 210, pls. 4, 5; pl. 7, figs. 5-8, 1907.

= *Cidaris rugosa* (Clark)--see Mortensen's Monograph of the Echinoidea, vol. 1, p. 305.

Lectotype (Mortensen, *ibid.*, p. 305):

MCZ 166 (dry), off Georgia, 229 fms. *Blake* collection.

Syntypes:

USNM 21463 (1 dry), *Albatross* Sta. 2661, off Cape Canaveral, Florida, 29°16'30"N., 79°36'30"W., 438 fms., May 3, 1886.

USNM 14746 (1 alcohol), *Albatross* Sta. 2672, off Savannah, Georgia, 30°31' N., 79°05' W., 277 fms., May 5, 1886.

USNM 27444 (2 alcohol), *Albatross* Sta. 2753, off St. Lucia, West Indies, 13°34' N., 61°03'W., 280 fms., Dec. 4, 1887.

USNM 21253 (1 alcohol), *Fish Hawk* Sta. 6070, Mayaguez Harbor, Porto Rico, 220-225 fms., Jan. 21, 1899. This specimen is referred to by Mortensen in his Monograph as apparently one of Clark's syntypes. It was cataloged in our collection as *Dorocidaris rugosa*, identified by H. L. Clark, and does seem to be one of the original syntypic series, although the only label in the jar (written in pencil on pulp paper, much torn) reads *Dorocidaris papillata*.

USNM 21444 (1 alcohol), *Albatross* Sta. 2662, off St. Augustine, Florida, 29°24'30"N., 79°43' W., 434 fms., May 4, 1886. This specimen was originally cataloged under this number as *Dorocidaris papillata* together with another specimen (USNM 14747). USNM 14747, identified by Clark as *Dorocidaris abyssicola*, has been assigned to the other specimen and the specimens placed in separate jars.

USNM E19642 (1 dry), *Blake* Sta. 218, off St. Lucia, West Indies, 164 fms., 1878-79. This specimen was one of four cataloged together (USNM 6834); the other three in the lot were identified by Clark as *Tretocidaris affinis*.

MCZ 163 (1 dry), off Georgia, 337 fms., *Blake* collection.

MCZ 164 (5 dry), Martinique, 213 fms., *Blake* collection.

MCZ 167 (9 dry), St. Lucia, 164 fms., *Blake* collection.

MCZ 332 (1 dry), St. Lucia, 226 fms., *Blake* collection.

MCZ 190 (1 alcohol), St. Lucia, 226 fms., *Blake* collection.

MCZ 194 (2 alcohol), Martinique, 189 fms., *Blake* collection.

MCZ 207 (2 alcohol), St. Vincent, 174 fms., *Blake* collection.

MCZ 208 (1 alcohol), Barbados, 209 fms., *Blake* collection.

Echinarachnius griseus Mortensen

Annotationes Zoologicae Japonensis, vol. 11, p. 195, pl. 1, 1927.

= *Scaphechinus griseus* (Mortensen)--see Mortensen's Monograph of the Echinoidea, vol. 4, no. 2, p. 379.

Paratype:

MCZ 5022 (1 dry), Yamagata-ken, Japan.

Echinarachnius parma var. *obesa* H. L. Clark

Although specimens in the U.S. National Museum (USNM 34315, 34214, 34213, and 34291) and specimens in the Museum of Comparative Zoology (MCZ 2322, 2323, 2324, 4200, 4216, and 4217) were marked type material and so cataloged, H. L. Clark clearly stated, in his original description in 1914, that this is not a species or subspecies, but at most a variety. Mortensen, in his Monograph, concurred in this opinion, even though he lists it as *Echinarachnius parma obesa*, as if it were a recognized subspecies. The USNM specimens have been removed from the type collection and placed in the regular collection.

Echinocardium dubium A. Agassiz and H. L. Clark

Bulletin of the Museum of Comparative Zoology at Harvard, vol. 51, no. 5, p. 134, 1907.

= *Echinocardium lymani* (Lambert and Thiery)--see Mortensen's Monograph of the Echinoidea, vol. 5 no. 2, p. 164. *Echinocardium dubium* is preoccupied (Peron and Gauthier, 1885, for a fossil).

Syntypes:

USNM E837 (dry), *Albatross* Sta. 5047, between Hakodate and Yokohama, Japan, 38°12'50"N., 141°49'15"E., 107 fms., Oct. 10, 1906.

MCZ 4344 (1 dry), *Albatross* Sta. 4965, between Kobe and Yokohama, Japan, 191 fms.

Echinocardium laevigaster A. Agassiz

Bulletin of the Museum of Comparative Zoology at Harvard, vol. 1, p. 277, 1869.

Holotype:

MCZ 3095 (dry), Florida, 79-121 fms. Pourtales collection.

Echinocidaris incisa A. Agassiz

Proceedings of the Academy of Natural Sciences, Philadelphia, 1863, p. 20.

= *Arbacia incisa* (Agassiz)--see H. L. Clark, p. 159, 1923.

Syntypes:

MCZ 467 (1 dry), Panama (no exact locality given).

MCZ 475 (1 dry), Guaymas, Mexico (exact locality not known).

MCZ 523 (2 alcohol), Guaymas, Mexico (exact locality not known).

Echinocrepis setigera A. Agassiz

Bulletin of the Museum of Comparative Zoology at Harvard, vol. 32, p. 78, pl. 13, 1898.

= *Cystocrepis setigera* (Agassiz)--see Mortensen's Monograph of the Echinoidea, vol. 5, no. 1, p. 157.

Syntypes:

MCZ 2779 (1 dry), *Albatross* Sta. 3399, off Galera Point, Ecuador, 1,740 fms.

MCZ 2780 (3 dry), *Albatross* Sta. 3415, south of Acapulco, Mexico, 1,879 fms.

MCZ 2781 (1 dry), *Albatross*, off Galera Point, Ecuador, 1,573 fms.

Echinocyamus apicatus Mortensen

Videnskabelige Meddelelser fra den naturhistoriske Forening i Kjobenhavn, bd. 112, p. 5, 1948.

Holotype:

MCZ 8051 (dry), Jibbon Strait, off Port Hocking, 2 miles, New South Wales 55 fms., July 24, 1943.

Paratypes:

MCZ 8094 (2 dry), same as 8051.

Echinocyamus elongatus H. L. Clark

Memoirs of the Museum of Comparative Zoology at Harvard, vol. 46, no. 1, p. 61, pl. 126, figs. 9-11, 1914.

= *Echinocyamus crispus* Mazzetti--see Mortensen's Monograph of the Echinoidea, vol. 4, no. 2, p. 185.

Syntypes:

USNM 34235 (1 dry), *Albatross* Sta. 3846, south coast of Molokai, Hawaii, 60-64 fms., Apr. 8, 1902.

USNM 34236 (1 dry), *Albatross* Sta. 4064, northeast coast of Hawaii, 63-107 fms., July 18, 1902.

USNM 34237 (1 dry), *Albatross* Sta. 4148, vicinity of Bird Island, Hawaii, 26-33 fms., Aug. 5, 1902.

MCZ 4212 (1 dry), *Albatross* Sta. 3846, see above.

Although Clark stated that a specimen from *Albatross* Station 3846 is the type, he failed to specify which one, so all of the above material must be treated as syntypes.

Echinocyamus incertus H. L. Clark

Memoirs of the Museum of Comparative Zoology at Harvard, vol. 46, no. 1, p. 64, pl. 128, figs. 1-3, 1914.

Holotype:

USNM 34208 (dry), *Albatross* Sta. 4045, west coast of Hawaii, 147-198 fms., July 11, 1902.

Echinocyamus megapetalus H. L. Clark

Memoirs of the Museum of Comparative Zoology at Harvard, vol. 46, no. 1, p. 60, pl. 126, figs. 5-8, 1914.

Holotype:

MCZ 4747 (dry) Mauritius (exact locality not known).

Paratypes:

MCZ 2294 (4 dry), same as 4747.

Echinocyamus planissimus H. L. Clark

Memoirs of the Museum of Comparative Zoology at Harvard, vol. 55, p. 422, pl. 27, figs. 5-8, 1938.

Holotype:

MCZ 7234 (dry), Pearl Shoals, Broome, Western Australia, 5-7 fms., 1929.

Paratypes:

MCZ 7235 (3 dry), Broome, Western Australia, 1929.

Echinocyamus platytatus H. L. Clark

Memoirs of the Museum of Comparative Zoology at Harvard, vol. 46, no. 1, p. 63, pl. 127, figs. 1-6, 1914.

Syntypes:

MCZ 2306 (57 dry), Portsea, Victoria, Australia.

Echinocyamus polyporus Mortensen

Videnskabelige Meddelelser fra den naturhistoriske Forening i Kjøbenhavn, bd. 73, p. 176, pl. 6, figs. 28-31, 1921.

= *Echinocyamus (Mortonia) polyporus* Mortensen--see Mortensen's Monograph of the Echinoidea, vol. 4, no. 2, p. 200.

Paratype:

MCZ 5016 (1 dry), Cook Strait, New Zealand, 20 fms.

Echinocyamus scaber var. *subconicus* Mortensen

Monograph of the Echinoidea, vol. 4, no. 2, p. 188, pl. 46, figs. 34-36, 1948.

Syntype:

USNM E7169 (1 dry), Kei Island, 233 meters, May 1922.

Although Mortensen refers, in the Monograph, to previous publication of this variety (which he considers is probably a subspecies) in Vidensk. Medd. fra Dansk. in 1948, this paper did not actually appear until 1949, thus making the Monograph reference the original publication.

Echinolampas sternopetala A. Agassiz and H. L. Clark

Bulletin of the Museum of Comparative Zoology at Harvard, vol. 50, no. 8, p. 130, 1907.

= *Planilampas sternopetala* (Agassiz and Clark)--see Mortensen's Monograph of the Echinoidea, vol. 4 no. 1, p. 298.

Paratype:

MCZ 4300 (1 dry), Albatross Sta. 3749, off Sumo Saki, Honshu, Japan, 83-158 fms.

Echinometra insularis H. L. Clark

Memoirs of the Museum of Comparative Zoology at Harvard, vol. 32, no. 4, p. 374, pl. 95, figs. 13-15; pl. 114, figs. 3-4, 1912.

Syntypes:

USNM 32802 (1 dry), Easter Island, *Albatross* shore collection, 1904.

USNM 32803 (1 dry), see above.

USNM 32804 (2 dry), Socorro Island, off west coast of Mexico, *Albatross* shore collection, Mar. 8, 1889.

USNM 32801 (1 dry), Easter Island, see above.

USNM 31173 (7 alcohol), Easter Island, see above.

MCZ 3984 (2 dry), Easter Island, see above.

MCZ 3985 (1 dry), Socorro Island, see above.

MCZ 4054 (2 alcohol), same as 3984.

Echinometra picta A. Agassiz and H. L. Clark

Bulletin of the Museum of Comparative Zoology at Harvard, vol. 50, no. 8, p. 241, 1907.

= *Echinometra mathaei* (Blainville)--see Mortensen's Monograph of the Echinoidea, vol. 3, no. 3, p. 382.

Syntypes:

USNM 32815 (1 dry), Puako Bay, Hawaii, *Albatross*, 1902.

USNM 31174 (11 alcohol), Puako Bay, Hawaii, *Albatross*, 12 fms., July 11, 1902.

USNM 31176 (1 alcohol), Kamalina Bay, Hawaii, *Albatross*, 1902.

USNM 32814 (3 dry), Puako Bay, Hawaii, *Albatross*, 1902.

USNM 32813 (1 dry), same as 32814.

USNM 32812 (2 dry), reef, Honolulu, Oahu, Hawaii, *Albatross*, May 8, 1902.

USNM 32811 (1 dry), *Albatross* Sta. 3975, Necker Island, Shoal to Bird Island, Hawaii, 23°30'N., 164°41'W., 16-171 fms., May 31, 1902.

USNM 32810 (1 dry), *Albatross* Sta. 3881, Napili Harbor, Maui, Hawaii, Apr. 16, 1902.

Echinometra plana A. Agassiz

Bulletin of the Museum of Comparative Zoology at Harvard, vol. 1, p. 22, 1863.

= *Echinometra viridis* (Agassiz)--see Mortensen's Monograph of the Echinoidea, vol. 3, no. 3, p. 368.

Syntype:

MCZ 1864 (1 dry), Haiti (exact locality not known).

Echinometra vanbrunti A. Agassiz

Bulletin of the Museum of Comparative Zoology at Harvard, vol. 1,
H. L. Clark, p. 342, 1912.

Syntypes:

MCZ 1851 (11 dry), Acapulco, Mexico.

MCZ 2129 (9 alcohol), same as 1851.

Echinometra viridis A. Agassiz

Bulletin of the Museum of Comparative Zoology at Harvard, vol. 1,
p. 22, 1863.

Syntype:

MCZ 1858 (5 dry), Key Biscayne, Florida.

Echinostrephus aciculatum A. Agassiz

Bulletin of the Museum of Comparative Zoology at Harvard, vol. 1,
p. 21, 1863.

Syntypes:

MCZ 1561 (1 dry), Gilbert Islands.

MCZ 1562 (1 dry), Hawaiian Islands.

MCZ 1035 (1 dry) same as 1561.

MCZ 2036 (1 alcohol) Hawaiian Islands.

Echinostrephus pentagonum Yoshiwara

Annotationes Zoologicae Japonenses, vol. 2, p. 59, 1898.

= *Echinostrephus molaris* (Blainville)--see H. L. Clark, p. 342, 1912.

Paratypes:

MCZ 3992 (2 dry), Ogasawarajima, Chichijune, Bonin Islands, Japan.

Echinus anchistus H. L. Clark

Memoirs of the Museum of Comparative Zoology at Harvard, vol. 34,
no. 4, p. 271, pl. 93, figs. 8-9; pl. 103, figs. 4-5; pl. 111, figs. 1-3, 1912.

Syntypes:

USNM 32849 (1 dry), *Albatross* Sta. 2788, off Port Otway, Patagonia,
45°35'S., 75°55'W., 1,050 fms., Feb. 11, 1888.

USNM 32850 (12 dry), *Albatross* Sta. 2788, see above.

USNM 30961 (15 alcohol), *Albatross* Sta. 2788, see above.

USNM 31206 (2 alcohol), *Albatross* Sta. 2789, off southern Chile,
42°36'S., 75°28'W., 1,342 fms., Feb. 12, 1888.

MCZ 3920 (3 dry), *Albatross* Sta. 2788, see above.

Echinus atlanticus Mortensen

The Danish *Ingolf*-Expedition, vol. 4, no. 1, p. 101, pl. 18, fig. 17; pl.
19, fig. 37, 1903.

Syntype:

MCZ 4728 (1 alcohol), *Challenger* Sta. 343, off Ascension Island, 425 fms.

Echinus diadema Studer

Monatsberichte Akademik der Berlin, p. 456, 1876.

= *Sterechinus diadema* (Studer)--see Mortensen's Monograph of the Echinoidea, vol. 3, no. 3, p. 102.

Syntype:

MCZ 2028 (1 dry), Kerguelen, *Gazelle* Expedition.

Echinus euryporus H. L. Clark

Memoirs of the Museum of Comparative Zoology at Harvard, vol. 34, no. 4, p. 266, pl. 93, figs. 2-3; pl. 198, figs. 4-6, 1912.

Holotype:

MCZ 1160 (dry), *Challenger* Sta. 308, off southern coast of Chile, 175 fms.

Echinus gracilis A. Agassiz

Bulletin of the Museum of Comparative Zoology at Harvard, vol. 1, p. 261, 1869.

= *Gracilechinus gracilis* (Agassiz)--see H. B. Fell and D. L. Pawson, in *Treatise on Invertebrate Palaeontology*, vol. U 3(2), p. 431.

Syntype:

MCZ 1163 (3 dry), off Sand Key, Florida, 120 fms., Pourtales collection.

Echinus horridus A. Agassiz

Proceedings of the American Academy of Arts and Sciences, vol. 14, p. 203, 1879.

= *Dermechinus horridus* (Agassiz)--see Mortensen's Monograph of the Echinoidea, vol. 3, no. 3, p. 112.

Syntype:

MCZ 1164 (1 dry), *Challenger* Sta. 308, off southern Chile, 175 fms.

Echinus purpuratus Stimpson

Boston Journal of Natural History, vol. 6, p. 526, 1857.

= *Strongylocentrotus purpuratus* (Stimpson)--see Mortensen's Monograph of the Echinoidea, vol. 3, no. 3, p. 236.

Type:

USNM 2495 (1 dry), North Pacific Exploring Expedition Sta. SF-54, San Francisco, California, 1853-56.

This is undoubtedly one of Stimpson's types, but whether he had more than one is not indicated in his description. This may well be the holotype.

Echinus tylodes H. L. Clark

Memoirs of the Museum of Comparative Zoology at Harvard, vol. 34, no. 4, p. 269, pl. 93, figs. 11-15; pl. 109, figs. 1-3, 1912.

Holotype:

MCZ 1212 (dry), *Blake* Sta. 319, off South Carolina, 32°25'N., 77°42' 30"W., 262 fms.

Echinus wallisii A. Agassiz

Bulletin of the Museum of Comparative Zoology at Harvard, vol. 8, p. 77, 1880.

Holotype:

MCZ 1220 (dry), *Blake* Sta. 306, south of George's Bank. 524 fms.

Paratype:

MCZ 1219 (1 dry), *Blake* Sta. 309, southeast of Nantucket, 304 fms.

Encope californica Verrill

American Journal of Science, vol. 49, p. 97, 1870.

= *Encope micropora californica* (Verrill)--see Mortensen's Monograph of the Echinoidea, vol. 4 no. 2, p. 445.

Syntypes:

MCZ 2378 (1 dry), La Paz, Mexico, Pedersen collection.

MCZ 2379 (2 dry), same as 2378.

Encope cocosi H. L. Clark

Report on the Echini of the warmer Eastern Pacific. *Velero* III, p. 330, pl. 56, figs. 48-49, 1948.

= *Encope micropora cocosi* (Clark)--see Mortensen's Monograph of the Echinoidea, vol. 4, no. 2, p. 448.

Paratype:

MCZ 8125 (1 dry), Cocos Island, Costa Rica, 24 fms., Allan Hancock Expedition Sta. 108, 1933.

Encope ecuadorensis H. L. Clark

Report on the Echini of the warmer Eastern Pacific. *Velero* III, p. 33, pl. 59, figs. 54-55, 1948.

= *Encope micropora ecuadorensis* (Clark)--see Mortensen's Monograph of the Echinoidea, vol. 4, no. 2, p. 446.

Paratype:

MCZ 8120 (1 dry), Salango Island, Ecuador, 3 fms., Allan Hancock Expedition Sta. 395, 1935.

Encope fragilis H. L. Clark

Report on the Echini of the warmer Eastern Pacific. *Velero* III, p. 335, pl. 60, 1948.

= *Encope micropora fragilis* (Clark)--see Mortensen's Monograph of the Echinoidea, vol. 4, no. 2, p. 447.

Paratype:

MCZ 8124 (1 dry), White Friars, Mexico, 20-25 fms., Allan Hancock Expedition Sta. 363, 1939.

Encope insularis H. L. Clark

Report on the Echini of the warmer Eastern Pacific. *Velero* III, p. 336, pl. 61, 1948.

= *Encope micropora insularis* (Clark)--see Mortensen's Monograph of the Echinoidea, vol. 4, no. 2, p. 447.

Paratype:

MCZ 8119 (1 dry), Socorro Island, Braithwaite Bay, Mexico, 14-18 fms., Allan Hancock Expedition Sta. 12a, 1934.

Encope irregularis H. L. Clark

Report on the Echini of the warmer Eastern Pacific. *Velero* III, p. 332, pl. 58, 1948.

= *Encope micropora irregularis* (Clark)--see Mortensen's Monograph of the Echinoidea, vol. 4, no. 2, p. 448, 1948.

Paratype:

MCZ 8121 (1 dry), Octavia Bay, Colombia, 2 fms., Allan Hancock Expedition Sta. 434, 1935.

Encope laevis H. L. Clark

Report on the Echini of the warmer Eastern Pacific. *Velero* III, p. 327, pl. 54, figs. 45; pl. 55, fig. 46, 1948.

Paratypes:

USNM E7165 (1 dry), *Velero* Sta. 962-39, 11 miles northwest of Corinto, Nicaragua, 1-3 fms., May 4, 1934.

MCZ 8123 (2 dry), see above.

Encope micropora var. *borealis* A. H. Clark

Smithsonian Miscellaneous Collection, vol. 106, no. 5, p. 6, pl. 4, 1946.

Holotype:

USNM E6794 (dry), *Albatross* Sta. 3028, northern Gulf of California, 31°32'30"N., 114°20'W., 9.5 fms., Mar. 26, 1889.

Paratype:

USNM 17387 (1 dry), *Albatross*, Concepcion Bay, Gulf of California, Mar. 19, 1889.

Encope occidentalis Verrill

Transactions of the Connecticut Academy of Science, vol. 1, p. 309, pl. 10, 1867.

= *Encope micropora* (Agassiz)--see Mortensen's Monograph of the Echinoidea, vol. 4, no. 2, p. 444.

Syntype:

MCZ 2414 (1 dry), Panama (exact locality not known).

Encope wetmorei A. H. Clark

Smithsonian Miscellaneous Collection, vol. 106, no. 5, p. 2, pls. 1, 2, 1946.

Holotype:

USNM E6768 (dry), Pearl Islands, Panama, Mar. 1, 1944.

Paratypes:

USNM 10017 (5 dry), Mazatlan, Mexico, 1885.

USNM 3081 (1 dry), Mazatlan, Mexico.

Eobrissus townsendi Bell

Annals and Magazine of Natural History (7), vol. 13, p. 236, 1904.

= *Metalia townsendi* (Bell)--see Mortensen's Monograph of the Echinoidea, vol. 5, no. 2, p. 545.

Syntype:

MCZ 4762 (dry), Oman, Persian Gulf.

Eremopyga debilis Mortensen

U.S. National Museum Bulletin 100, vol. 14, pt. 1, p. 34, 1940.

Paratypes:

USNM E9042 (4 alcohol), *Albatross* Sta. 5243, Uanivan Island, Pujada Bay, Philippines, 6°50'55"N., 126°14'35"E., 218 fms., May 15, 1908.

USNM E9070 (2 alcohol), *Albatross* Sta. 5241, Uanivan Island, Pujada Bay, Philippines, 6°50'45"N., 126°14'38"E., 215 fms., May 14, 1908.

Labels in Mortensen's writing in both the above jars indicate that these are cotypes. Nine other specimens listed by Mortensen, including the holotype, have apparently been lost or destroyed.

Eupatagus longispinus A. Agassiz

Bulletin of the Museum of Comparative Zoology at Harvard, vol. 5, p. 191, 1878.

= *Linopneustes longispinus* (Agassiz)--see Mortensen's Monograph of the Echinoidea, vol. 5, no. 1, p. 216.

Holotype:

MCZ 2823 (dry), off Havana, Cuba, 242 fms., Sigsbee collection.

Eupatagus rubellus Mortensen

U.S. National Museum Bulletin 100, vol. 14, pt. 3, p. 129, 1948.

Holotype:

USNM E7157 (dry), *Albatross* Sta. 5158, Tinakta Island, Tawi Tawi, 5°12'N., 119°54'30"E., 12 fms., Feb. 18, 1908.

Eurypatagus ovalis Mortensen

U.S. National Museum Bulletin 100, vol. 14, pt. 3, p. 134, 1948.

Holotype:

USNM E7159 (dry), *Albatross* Sta. 5217, Anima Sola Island, Philippines, 13°20'N., 123°14'15"E., 105 fms., Apr. 22, 1908.

Paratype:

USNM E9514 (2 dry), *Albatross* Sta. 5217, see above.

Fibularia nutriens H. L. Clark

Memoirs of the Australian Museum, vol. 4, p. 557, pl. 58, figs. 1-11, 1909.

Syntypes:

MCZ 2315 (7 dry), *Thetis* Sta. 13, off Cape Three Points, New South Wales, 41-50 fms.

MCZ 2610 (15 alcohol), same as 2315.

Fibularia plateia H. L. Clark

Records of the South Australian Museum, vol. 3, p. 477, 1928.

Paratypes:

MCZ 5019 (37 dry), Backstairs Passage, South Australia, 17-25 fms.

Genocidaris apoda A. Agassiz and H. L. Clark

Bulletin of the Museum of Comparative Zoology at Harvard, vol. 51, no. 5, p. 126, 1907.

= *Temnopleurus (Torematica) apodus* (Agassiz and Clark)--see Mortensen's Monograph of the Echinoidea, vol. 3, no. 2, p. 99.

Syntypes:

USNM 32726 (1 dry), *Albatross* Sta. 4891, southwest of Goto Islands, Japan, 32°27'N., 128°34'E., 181 fms., Aug. 9, 1906.

USNM 32725 (1 dry), *Albatross* Sta. 4904, southwest of Goto Islands, Japan, 32°31'20"N., 128°32'40"E., 107 fms., Aug. 10, 1906.

MCZ 3931 (1 dry), *Albatross* Sta. 4891, see above.

Genocidaris decipiens de Meijere

Die Echinoiden der *Siboga* Expedition, p. 76, taf. 16, figs. 264-266, 1904.

= *Temnopleurus (Torematica) decipiens* (de Meijere)--see Mortensen's Monograph of the Echinoidea, vol. 3, no. 2, p. 104.

Syntypes:

MCZ 1410 (2 dry), *Siboga* Sta. 313, Saleh Bay, Sumbawa, Dutch East Indies, 20 fms.

MCZ 7419 (3 dry), same as 1410.

Genocidaris incerta H. L. Clark

Records of the South Australian Museum, vol. 3, p. 457, 1928.

Paratypes:

MCZ 4956 (13 dry), off Beachport, South Australia, 150 fms.

Genocidaris maculata A. Agassiz

Bulletin of the Museum of Comparative Zoology at Harvard, vol. 1, p. 262, 1869.

Syntypes:

MCZ 1411 (1 dry), off Tortugas, Florida, 68 fms.

MCZ 1413 (5 dry), off Sand Key, Florida, 119-125 fms.

- MCZ 1417 (6 dry), off Tennessee Reef, Florida, 115 fms.
MCZ 1418 (10 dry), off Corysfort Reef, Florida, 40-63 fms.
MCZ 1423 (11 dry), off Tortugas, Florida, 30-68 fms.
MCZ 1424 (7 dry), off Conch Reef, Florida, 30-169 fms.
MCZ 1426 (7 dry), off Alligator Reef, Florida, 79-147 fms.
MCZ 2883 (8 alcohol), off Conch Reef, Florida, 9-77 fms.

Glyptocidaris crenularis A. Agassiz

Proceedings of the Academy of Natural Sciences, Philadelphia, p. 356, 1863.

Syntype:

MCZ 1105 (1 dry), Hakodate, Japan, Wm. Stimpson collection.

Gonimaretia laevis H. L. Clark

Memoirs of the Museum of Comparative Zoology at Harvard, vol. 46, no. 2, p. 244, pl. 149, figs. 1-2; pl. 161, figs. 5-7, 1917.

= *Pseudomaretia laevis* (Clark)--see Mortensen's Monograph of the Echinoidea, vol. 5, no. 2, p. 67.

Syntypes:

USNM E805 (1 dry), *Albatross* Sta. 2911, south of San Clemente Island, California, 32°27'30"N., 119°05'W., 60 fms., Jan. 16, 1902.

USNM E917 (1 dry), *Albatross* Sta. 2911, see above.

MCZ 4384 (1 dry), *Albatross* Sta. 2911, see above.

Gonimaretia tylosa H. L. Clark

Memoirs of the Museum of Comparative Zoology at Harvard, vol. 46, no. 2, p. 241, 1917.

= *Pseudomaretia tylosa* (Clark)--see Mortensen's Monograph of the Echinoidea, vol. 5, no. 2, p. 62.

Holotype:

MCZ 3208 (dry), *Challenger* Sta. 192, near Aru Islands, 129 fms.

MCZ 3282 (1 alcohol), same as 3208.

MCZ 4385 (1 dry), same as 3208.

MCZ 4765 (1 dry), same as 3208.

Goniocidaris crassa Mortensen

Videnskabelige Meddelelser fra den naturhistoriske Forening i Kjobenhavn, bd. 85, p. 68, 1928.

= *Goniocidaris (Aspidocidaris) crassa* Mortensen--see Mortensen's Monograph of the Echinoidea, vol. 1, p. 195.

Paratype:

MCZ 4857 (1 dry), Mindanao, Philippines, 250 fms.

Goniocidaris doederleini A. Agassiz

Bulletin of the Museum of Comparative Zoology at Harvard, vol. 32, no. 5, p. 73, pl. 3, fig. 1, 1898.

= *Centrocidaris doederleini* (Agassiz)--see Agassiz, 1904, p. 33.

Holotype:

USNM 27348 (dry), *Albatross* Sta. 3369, off Cocos Island, west of Panama, 5°32'45"N., 86°55'20"W., 52 fms., Feb. 28, 1891.

Goniocidaris florigera A. Agassiz

Proceedings of the American Academy of Arts and Sciences, vol. 14, p. 198, 1879.

= *Goniocidaris* (*Petalocidaris*) *florigera* Agassiz--see Mortensen's Monograph of the Echinoidea, vol. 1, p. 167.

Syntypes:

MCZ 400 (spines, dry), south of Tionfolokker Island, Kei Island, 127 fms.

MCZ 401 (spines, dry), near Tablas Island, Philippines, 115 fms.

Goniocidaris membranipora Studer

Monatsberichte Akademie der Berlin, p. 454, 1876.

= *Ctenocidaris* (*Eurocidaris*) *nutrix* (Wyville-Thomson)--see Mortensen's Monograph of the Echinoidea, vol. 1, p. 128.

Syntype:

MCZ 2025 (3 dry), Kerguelen, *Gazelle* Expedition.

Goniocidaris (*Cyrtocidaris*) *tenuispina* Mortensen

U.S. National Museum Bulletin 100, vol. 6, pt. 4, p. 264, pl. 57, figs. 1-2; pl. 58, fig. 1; pl. 58, fig. 2; pl. 61, figs. 6-8; pl. 63, fig. 5; pl. 73, figs. 5-6; pl. 79, figs. 1-3, 1927.

Holotype:

USNM E1335 (dry), *Albatross* Sta. 5487, San Ricardo Point, Panaon Island, between Leyte and Mindanao, Philippines, 10°02'45"N., 125°05'33"E., 732 fms., July 31, 1909.

Paratypes:

USNM E1318 (12 dry), *Albatross* Sta. 5512, Camp Overton Light, northern Mindanao, Philippines, 8°16'02"N., 123°58'26"E., 445 fms., Aug. 7, 1909.

USNM E1344 (4 dry), *Albatross* Sta. 5488, San Ricardo Point, Panaon Island, between Leyte and Mindanao, Philippines, 10°N., 125°06'45"E., 772 fms., July 31, 1909.

USNM E1345 (5 dry), *Albatross* Sta. 5527, Balicasag Island, between Siquijor and Bohol Islands, Philippines, 9°22'30"N., 123°42'40"E., 392 fms., Aug. 11, 1909.

USNM E1346 (5 dry), *Albatross* Sta. 5511, Camp Overton Light, northern Mindanao, Philippines, 8°15'20"N., 123°57'E., 410 fms., Aug. 7, 1909.

USNM E1372 (2 dry), *Albatross* Sta. 5512, see above.

USNM E1373 (1 dry), *Albatross* Sta. 5423, Cagayan Island, Jolo Sea, 9°38'30"N., 121°11'E., 508 fms., Mar. 31, 1909.

USNM E1379 (5 alcohol), *Albatross* Sta. 5423, see above.

USNM E1384 (1 alcohol), *Albatross* Sta. 5348, Port Tabonan, Palawan Passage, 19°57'45"N., 118°38'15"E., Dec. 27, 1908.

USNM E1386 (1 alcohol), *Albatross* Sta. 5519, Camp Overton Light, northern Mindanao, Philippines, 8°16'N., 123°03'50"E., 423 fms., Aug. 7, 1909.

Goniocidaris (Cyrtocidaris) tenuispina var. *major* Mortensen

U.S. National Museum Bulletin 100, vol. 6, pt. 4, p. 270, pl. 58, fig. 2; pl. 79, fig. 9, 1927.

Holotype:

USNM E1351 (dry), *Albatross* Sta. 5259, Caluya Island, northwestern Panay, 11°57'30"N., 121°42'15"E., 570 meters, June 3, 1908.

Goniocidaris (Cyrtocidaris) tenuispina var. *tuberculata* Mortensen

U.S. National Museum Bulletin 100, vol. 6, pt. 4, p. 269, pl. 57, fig. 3; pl. 59, fig. 1; pl. 61, figs. 9-11; pl. 73, figs. 7-8; pl. 79, figs. 4-8, 1927.

Holotype:

USNM E1374 (dry), *Albatross* Sta. 5219, between Marinduque and Luzon, Philippines, 13°12'N., 122°18'45"E., 969 meters, Apr. 23, 1908.

Paratypes:

USNM E1265 (2 dry), *Albatross* Sta. 5219, see above.

Goniocidaris (Petalocidaris) peltata Mortensen

U.S. National Museum Bulletin 100, vol. 6, pt. 4, p. 261, pl. 55, pl. 57, pl. 74, figs. 4-5; pl. 78, figs. 9-12, 1927.

= *Goniocidaris (Discocidaris) peltata* Mortensen--see Mortensen's Monograph of the Echinoidea, vol. 1, p. 183.

Holotype:

USNM E1324 (dry), *Albatross* Sta. 5617, Dodinga Bay, Gillolo Island, 0°49'30"N., 127°25'30"E., 239 meters, Nov. 27, 1909.

Gymnechinus epistichus H. L. Clark

Memoirs of the Museum of Comparative Zoology at Harvard, vol. 34, no. 4, p. 289, pl. 93, figs. 22-23; pl. 102, figs. 4-5, 1912.

Holotype:

MCZ 1289 (dry), Bohol, Philippines, 6-10 fms., Semper collection.

Paratypes:

MCZ 1290 (2 dry), Australia (exact locality not known).

Gymnechinus megaloplax H. L. Clark

Memoirs of the Museum of Comparative Zoology at Harvard, vol. 34, no. 4, p. 287, pl. 192, figs. 2-3, 1912.

= *Gymnechinus robillardi* (de Loriol)--see Mortensen's Monograph of the Echinoidea, vol. 3, no. 2, p. 427.

Holotype:

MCZ 1291 (dry), Persian Gulf, Townsend collection, 1895.

Gymnechinus pallidus Koehler

Investigator Echinoidea, vol. 3, p. 113, pl. 17, figs. 5, 13, 15; pl. 18, figs. 1-6; pl. 19, figs. 2-3; pl. 27, fig. 4, 1927.

= *Gymnechinus robillardi* (de Loriol)--see Mortensen's Monograph of the Echinoidea, vol. 3, no. 2, p. 426.

Syntypes:

MCZ 6078 (5 dry), Ceylon Coast, 26.5 fms.

Gymnechinus pulchellus Mortensen

Memoires de l'Academie Royale des Sciences et des Lettres de Denmark, 7 me series, t. 1, no. 1, p. 113, pl. 1, figs. 16-23; pl. 2, fig. 11; pl. 7, figs. 8, 29, 36, 41, 46, 1904.

Syntypes:

MCZ 1292 (3 dry), Gulf of Siam.

MCZ 1988 (4 alcohol), same as 1292.

MCZ 3605 (1 dry), same as 1292.

MCZ 3606 (1 dry), same as 1292.

Gymnopatagus magnus A. Agassiz and H. L. Clark

Bulletin of the Museum of Comparative Zoology at Harvard, vol. 51, no. 5, p. 133, 1907.

Syntypes:

USNM E891 (1 dry), *Albatross* Sta. 5083, off Omai Sake Light, Japan, 34°04'30"N., 137°57'30"E., 624 fms., Oct. 20, 1906.

USNM E892 (1 dry), *Albatross* Sta. 5082, off Omai Saki Light, Japan, 34°05'N., 137°59'E., 662 fms., Oct. 20, 1906.

USNM E4694 (1 dry), *Albatross* Sta. 5082, see above.

MCZ 4361 (1 dry), *Albatross* Sta. 5082, see above.

Gymnopatagus micropetalus H. L. Clark

Memoirs of the Museum of Comparative Zoology at Harvard, vol. 46, no. 2, p. 227, pl. 146, fig. 14; pl. 154, figs. 4-6; pl. 158, fig. 5, 1917.

= *Eupatagus micropetalus* (Clark)--see Mortensen's Monograph of the Echinoidea, vol. 5, no. 2, p. 474.

Syntypes:

USNM E898 (1 dry), *Albatross* Sta. 3749, off Suno Saki, Honshu, Japan, 83-158 fms., May 19, 1902.

MCZ 4362 (1 dry), *Albatross* Sta. 3751, off Suno Saki, Japan, 140-148 fms.

Gymnopatagus obscurus A. Agassiz and H. L. Clark

Bulletin of the Museum of Comparative Zoology at Harvard, vol. 50, no. 8, p. 254, 1907.

= *Eupatagus obscurus* (Agassiz and Clark)--see Mortensen's Monograph of the Echinoidea, vol. 5, no. 2, p. 473.

Syntypes:

USNM E841 (1 dry), *Albatross* Sta. 4081, off Puniawa Point, Maui, Hawaii, 202-220 fms., July 21, 1902.

USNM E896 (1 dry), *Albatross* Sta. 4081, see above.

USNM E897 (fragments, dry), *Albatross* Sta. 3912, off Diamond Head, Oahu, Hawaii, 310-334 fms., May 5, 1902.

USNM E4705 (3 dry), *Albatross* Sta. 4081, see above.

MCZ 4363 (1 dry), *Albatross* Sta. 4081, see above.

MCZ 4424 (1 alcohol), same as 4363.

Gymnopatagus pulchellus A. Agassiz and H. L. Clark

Bulletin of the Museum of Comparative Zoology at Harvard, vol. 50, no. 8, p. 254, 1907.

= *Eupatagus lymani* (Lambert and Thiery)--see Mortensen's Monograph of the Echinoidea, vol. 5, no. 2, p. 473.

Syntypes:

USNM E894 (1 dry), *Albatross* Sta. 3811, off Honolulu, Oahu, Hawaii, 52-238 fms., Mar. 27, 1902.

USNM E894 (1 dry), *Albatross* Sta. 4045, off Kawaihae Light, Hawaii, 147-198 fms., July 11, 1902.

USNM E895 (1 dry), *Albatross* Sta. 3810, off Honolulu, Hawaii, 53-211 fms., Mar. 27, 1902.

USNM E893 (1 dry), *Albatross* Sta. 3810, see above.

MCZ 4364 (2 dry), *Albatross* Sta. 3810, see above.

Eupatagus pulchellus was preoccupied by *Spatangus pulchellus* (Herklots, 1854, fossil), a *Eupatagus*, so the species was renamed by Lambert and Thiery in 1924.

Habrocidaris argentea A. Agassiz and H. L. Clark

Bulletin of the Museum of Comparative Zoology at Harvard, vol. 51, no. 8, p. 234, 1907.

Holotype:

USNM 27557 (dry), *Albatross* Sta. 3973, near French Frigate Shoal, Hawaii, 395-397 fms., May 29, 1902.

Heliocidaris erythrogramma var. *parvispina* H. L. Clark

Echinoderms from Australia, p. 404, 1938.

Holotype:

MCZ 7185 (dry), Point Peron, Western Australia, October 1929.

Paratype:

MCZ 7186 (1 dry), same as 7185.

Heliocidaris stenopora H. L. Clark

Memoirs of the Museum of Comparative Zoology at Harvard, vol. 34, no. 4, p. 351, pl. 95, figs. 18-22; pl. 104, figs. 1-3; pl. 119, figs. 4-5, 1912.
= *Echinometra vanbrunti* (Agassiz)--see Mortensen's Monograph of the Echinoidea, vol. 3, no. 3, p. 373.

Holotype:

MCZ 1744 (dry), Cape St. Lucas, Lower California.

Hemiaster cordatus Verrill

U.S. National Museum Bulletin 3, p. 69, 1876.

= *Abatus cordatus* (Verrill)--see Mortensen's Monograph of the Echinoidea, vol. 5, no. 2, p. 257.

Syntype:

USNM 3144 (1 alcohol), Kerguelen Island, Transit of *Venus* Expedition, 5-12 fms., 1874.

Hemiaster gibbosus A. Agassiz

Proceedings of the American Academy of Arts and Sciences, vol. 14, p. 210, 1879.

= *Hemiaster expergitus gibbosus* Agassiz--see Mortensen's Monograph of the Echinoidea, vol. 5, no. 1, pp. 387-388.

Syntypes:

MCZ 2845 (1 dry), *Challenger* Sta. 232, off Yokohama, Japan, 345 fms.

MCZ 2846 (1 dry), *Challenger* Sta. 191, near Aru Islands, 800 fms.

Hemiaster globulus A. Agassiz and H. L. Clark

Bulletin of the Museum of Comparative Zoology at Harvard, vol. 51, no. 5, p. 135, 1907.

= *Hemiaster clarki* Lambert--see Mortensen's Monograph of the Echinoidea, vol. 5, no. 1, p. 389.

Holotype:

USNM E723 (dry), *Albatross* Sta. 4832, Hondo, Japan, 36°14'30"N., 135°56'30"E., 76-79 fms., July 23, 1906.

Hemiaster globulus is preoccupied (Seguenza, 1882, fossil).

Hemiaster mentzi A. Agassiz

Bulletin of the Museum of Comparative Zoology at Harvard, vol. 8, p. 83, 1880.

= *Hemiaster expergitus* Loven--see Mortensen's Monograph of the Echinoidea, vol. 5, no. 1, p. 387.

Syntypes:

MCZ 2847 (2 dry), *Blake* Sta. 230, off St. Vincent, British West Indies, 464 fms.

MCZ 2848 (1 dry), *Blake* Sta. 136, off St. Cruz, Dutch West Indies, 508 fms.

MCZ 2849 (2 alcohol), same as 2847.

MCZ 2912 (1 dry), *Blake* Sta. 265, off Grenada, 516 fms.

Hemipedinia pulchella A. Agassiz and H. L. Clark

Bulletin of the Museum of Comparative Zoology at Harvard, vol. 50, pt. 8, p. 245, 1907.

= *Caenopedinia pulchella* (Agassiz and Clark)--see Mortensen's Monograph of the Echinoidea, vol. 3, no. 1, p. 114.

Syntypes:

USNM 32847 (1 dry), *Albatross* Sta. 3991, off Kauai, Hawaii, 272-296 fms., June 12, 1906.

MCZ 3910 (1 dry), *Albatross* Sta. 3991, see above.

Hemiphormosoma paucispinum Mortensen

Videnskabelige Meddelelser fra den naturhistoriske Forening i Kjobenhavn, bd. 98, p. 162, 1934.

Holotype:

USNM E3293 (dry), *Albatross* Sta. 5359, Sula Sea, 8°12'45"N., 120°37'15"E., 2,275 fms., Jan. 9, 1909.

Hesperaster arachnoides H. L. Clark

Echinoderms of Australia, p. 411, pl. 27, fig. 2, 1938.

= *Ammotrophus arachnoides* (Clark)--see Mortensen's Monograph of the Echinoidea, vol. 4, no. 2, p. 153.

Holotype:

MCZ 7196 (dry), between Freemantle and Rottnest Island, Western Australia, 10-12 fms., Oct. 19, 1929.

Hesperocidaris houstoniana A. H. Clark

Smithsonian Miscellaneous Collection, vol. 98, no. 11, p. 12, 1939.

Holotype:

USNM E5604 (dry), Tagus Cove, Albemarle Island, Galapagos, 50 ft., July 26, 1938, collected by W. L. Schmitt, Presidential Cruise 1938.

Paratypes:

USNM E5605 (1 dry), see above.

USNM E5606 (3 alcohol), see above.

Histocidaris acutispina Mortensen

U.S. National Museum Bulletin 100, vol. 6, pt. 4, p. 248, pl. 50, figs. 1-2; pl. 52, fig. 2; pl. 77, fig. 4, 1927.

Holotype:

USNM E1275 (dry), *Albatross* Sta. 5495, between Leyte and Mindanao, 9°06'30"N., 125°00'20"E., 1,785 fms., Aug. 2, 1909.

Histocidaris crassispina Mortensen

Videnskabelige Meddelelser fra den naturhistoriske Forening i Kjobenhavn, bd. 85, p. 66, 1928.

Holotype:

MCZ 251 (dry), *Challenger* Sta. 1646, off Sydney, New South Wales, 410 fms.

This was a syntype of *Porocidaris elegans* A. Agassiz (1881).

Histocidaris magnifica Mortensen

U.S. National Museum Bulletin 100, vol. 6, pt. 4, p. 245, pls. 48-49; pl. 76, figs. 1-3, 1927.

Holotype:

USNM E1342 (dry), *Albatross* Sta. 5547, Tulayan Island, near Jolo, 6°09'20"N., 121°13'40"E., 283 meters, Sept. 15, 1909.

Holopneustes pycnotylus H. L. Clark

Memoirs of the Museum of Comparative Zoology at Harvard, vol. 34, no. 4, p. 334, pl. 104, fig. 4; pl. 112, figs. 6-9, 1912.

= *Holopneustes inflatus* Lutken--see Mortensen's Monograph of the Echinoidea, vol. 3, no. 2, p. 218.

Holotype:

MCZ 1558 (dry), Port Jackson, New South Wales.

Paratypes:

MCZ 1559 (13 dry), same as 1558.

Homolampas fulva A. Agassiz.

Proceedings of the American Academy of Arts and Sciences, vol. 14, p. 209, 1879.

Syntype:

MCZ 2828 (1 dry), *Challenger* Sta. 271, Pacific Ocean, northwest of the Marquesas, 2,425 fms.

Homolampas hastata A. Agassiz

Bulletin of the Museum of Comparative Zoology at Harvard, vol. 32, p. 81, pl. 11, fig. 1, 1898.

Syntypes:

MCZ 2829 (1 dry), *Albatross* Sta. 3363, off Cocos Island, 978 fms., 1891.

MCZ 4318 (2 dry), *Albatross* Sta. 3365, eastern Pacific northeast of Cocos Island, 1,000 fms., 1891.

Homolampas lovenoides Mortensen

U.S. National Museum Bulletin 100, vol. 14, pt. 3, p. 117, 1948.

Holotype:

USNM E7150 (dry), *Albatross* Sta. 5650, Lamulu Point, Gulf of Boni, 4°53'45"S., 121°29'E., 988 meters, Dec. 17, 1909.

Hygrosoma aethiopicum Doderlein

Zoologischer Anzieger, vol. 28, p. 621, 1905.

= *Hygrosoma hoplacantha* (Wyville-Thomson)--see Mortensen's Monograph of the Echinoidea, vol. 2, p. 208.

Syntype:

MCZ 867 (1 dry), off east coast of Africa, 5°24'S., 39°20'E., 455 fms., *Valdina* collection.

Hypselauster affinis Mortensen

U.S. National Museum Bulletin 100, vol. 14, pt. 3, p. 121, 1948.

Holotype:

USNM E7152 (dry), *Albatross* Sta. 5582, Darvel Bay, Borneo, 4°19'54"N., 118°58'38"E., 1,629 meters, Sept. 26, 1909.

Paratypes:

USNM E9334 (1 dry), *Albatross* Sta. 5469, Atulayan Island, Philippines, 13°36'48"N., 123°38'24"E., 915 meters, June 18, 1909.

USNM E9425 (1 dry), *Albatross* Sta. 5637, Bouro Island, Celebes, 3°53'20"S., 126°48'E., 1,281 meters, Dec. 10, 1909.

Hypselauster brachypetalus H. L. Clark

Memoirs of the Museum of Comparative Zoology at Harvard, vol. 46, no. 2, p. 191, pl. 148, figs. 3-4; pl. 154, figs. 1-3, 1917.

Holotype:

MCZ 2869 (dry), *Blake* Sta. 268, off Grenada, 955 fms.

Hypselauster dolosus H. L. Clark

Echinoderms from Australia, p. 430, pl. 28, figs. 4-7, 1938.

Holotype:

MCZ 7255 (dry), jetty flat, Broome, Western Australia, 1929.

Paratypes:

MCZ 7245 (7 dry), see above.

Hypsiechinus coronatus Mortensen

The Danish *Ingolf*-Expedition, vol. 4, no. 1, p. 86, pl. 5, fig. 1; pl. 7, figs. 1-20; pl. 8, figs. 5, 9, 15, 17, 18, 24, 25, 38; pl. 11, figs. 6, 1903.

Syntype:

MCZ 1400 (2 dry), *Ingolf* Sta. 81-84, southwest of Iceland, 61°44'N., 27°11'W., 485-633 fms.

Idiobryssus coelus H. L. Clark

Allan Hancock Pacific Expeditions, vol. 2, p. 173, pl. 17, figs. 1-2, 1939.

Paratype:

MCZ 7495 (1 dry), *Velero* Sta. 783, Tower Island, Darwin Bay, Galapagos Islands, 40-79 fms., 1938.

Isopatagus obovatus Mortensen

U.S. National Museum Bulletin 100, vol. 14, pt. 3, p. 113, 1948.

Holotype:

USNM E7149 (dry), *Albatross* Sta. 5425, Cagayan Island, Jolo Sea, 8°37'45"N., 121°11'E., 907 meters, Mar. 31, 1909.

Paratypes:

USNM E9515 (1 alcohol), *Albatross* Sta. 5425, see above.

USNM E9347 (1 dry), *Albatross* Sta. 5425, see above.

Keraiophorus maillardi Michelin

Notes sur l'Ile de Réunion. Annexe A., p. 2, pl. 14, 1862.

= *Coelopleurus maillardi* (Michelin)--see Mortensen's Monograph of the Echinoidea, vol. 2, p. 627.

Holotype:

MCZ 499 (spines, dry), Bourbon (exact locality not known).

These are spines only, from the holotype in the Paris Museum.

Laganum analis de Meijere

Die Echinoiden der Siboga Expedition, p. 129, taf. 6, figs. 71-72; taf. 13, figs. 340-343, 1904.

= *Peronella analis* (de Meijere)--see H. L. Clark, 1914, p. 54.

Syntype:

MCZ 2659 (1 dry), Kei Islands, off Nuhu, Jaan, Dutch East Indies, 50 fms.

Laganum diploporum A. Agassiz and H. L. Clark

Bulletin of the Museum of Comparative Zoology at Harvard, vol. 51, no. 5, p. 126, 1907.

= *Laganum fudsiyama* Doderlein--see Mortensen's Monograph of the Echinoidea, vol. 4, no. 2, p. 343.

Syntypes:

USNM 34229 (2 dry), *Albatross* Sta. 4885, southwest of Nagasaki, Japan, 32°31'30"N., 129°30'15"E., 53 fms., Aug. 8, 1906.

USNM 34230 (2 dry), *Albatross* Sta. 4888, southwest of Nagasaki, Japan, 32°26'N., 129°27'30"E., 71 fms., Aug. 8, 1906.

USNM 34231 (6 dry), *Albatross* Sta. 4893, southwest of Goto, Japan, 32°32'N., 128°32'50"E., 95-106 fms., Aug. 9, 1906.

USNM 34232 (3 dry), *Albatross* Sta. 4904, southwest of Goto, Japan, 32°31'20"N., 128°32'40"E., 107 fms., Aug. 10, 1906.

USNM 34233 (1 dry), *Albatross* Sta. 4937, Kagoshima Gulf, Japan, 31°13'N., 130°43'10"E., 58 fms., Aug. 16, 1906.

USNM 34234 (2 dry), *Albatross* Sta. 5055, Suruga Gulf, Japan, 34°53'N., 138°44'15"E., 124 fms., Oct. 12, 1906.

USNM 34263 (10 alcohol), *Albatross* Sta. 4893, see above.

USNM 34264 (5 alcohol), *Albatross* Sta. 4895, southwest of Goto, Japan, 32°33'10"N., 128°32'10"E., 95 fms., Aug. 9, 1906.

USNM 34265 (6 alcohol), *Albatross* Sta. 4904, see above.

USNM 34266 (2 alcohol), *Albatross* Sta. 4933, off Kagoshima Gulf, Japan, 30°59'N., 139°29'50"E., 108 fms., Oct. 15, 1906.

MCZ 4195 (2 alcohol), *Albatross* Sta. 5092, off Gulf of Tokyo, Japan, 70 fms.

MCZ 4196 (3 alcohol), *Albatross* Sta. 4902, southwest of Goto Islands, Japan, 139 fms.

MCZ 4207 (3 dry), *Albatross* Sta. 5092, see above.

MCZ 4208 (4 dry), *Albatross* Sta. 4902, see above.

MCZ 4209 (1 dry), *Albatross* Sta. 4934, off Kagoshima, Japan, 103-152 fms.

Laganum dyscritum H. L. Clark

Echinoderm Fauna of Australia, p. 344, 1946.

= *Laganum depressum* Lesson--see Mortensen's Monograph of the Echinoidea, vol. 4, no. 2, p. 315.

Paratypes:

MCZ 6019 (8 dry), Low Isles, North Queensland, 1928.

MCZ 7020 (2 alcohol), west of Low Isles, North Queensland, 1928.

Laganum putnami A. Agassiz

Proceedings of the Academy of Natural Sciences, Philadelphia, p. 359, 1863.

Syntypes:

MCZ 2251 (1 dry), Ousima, Japan.

MCZ 2252 (1 dry), see above.

MCZ 2597 (1 alcohol), see above.

Laganum solidum de Meijere

Die Echinoiden der *Siboga*-Expedition, p. 121, taf. 6, figs. 64, 66, 1904.

Syntype:

MCZ 2658 (2 dry), *Siboga* Sta. 289, off south coast of eastern Timor, 62 fms.

Laganum strigata A. Agassiz and H. L. Clark

Bulletin of the Museum of Comparative Zoology at Harvard, vol. 50, no. 8, p. 250, 1907.

= *Peronella strigata* (Agassiz and Clark)--see Mortensen's Monograph of the Echinoidea, vol. 4, no. 2, p. 295.

Holotype:

USNM 34206 (dry), *Albatross* Sta. 3859, Pailolo Channel, Hawaii, 138-140 fms., Apr. 9, 1902.

Leptodiadema purpureum A. Agassiz and H. L. Clark

Bulletin of the Museum of Comparative Zoology at Harvard, vol. 50, no. 8, p. 239, 1907.

Holotype:

USNM 27555 (dry), *Albatross* Sta. 3847, Molokai, Hawaii, 23-24 fms., Apr. 8, 1902.

Linopneustes excentricus de Meijere

Tijdschrift Nederland Dierk Vereen. (2), vol. 8, p. 13, 1902.

Syntype:

MCZ 2819 (1 dry), *Siboga* Sta. 314, among the Paternoster Islands, 385 fms.

Lissonotus fragilis A. Agassiz

Bulletin of the Museum of Comparative Zoology at Harvard, vol. 1, p. 273, 1869.

= *Homolampas fragilis* (Agassiz)--see Mortensen's Monograph of the Echinoidea, vol. 5, no. 1, p. 266.

Syntypes:

MCZ 2827 (1 dry), off Carysfort, Florida, 320 fms.

MCZ 2903 (1 dry), off Boca Grande, 368 fms.

Lovenia camarota H. L. Clark

Memoirs of the Museum of Comparative Zoology at Harvard, vol. 46, no. 2, p. 253, pl. 161, figs. 1-4, 1917.

Holotype:

MCZ 3201 (dry), *Challenger* Sta. 188, Torres Strait, 28 fms.

Lovenia cordiformis A. Agassiz

Bulletin of the Museum of Comparative Zoology at Harvard, vol. 3, p. 57, 1872.

Syntype:

MCZ 3188 (1 dry), Guaymas, Mexico.

Mortensen, following Agassiz's lead, credits Lütken with authorship of this species; however, Lütken's name was in manuscript only and was never published, so Agassiz is the true author of the species.

Lovenia doderleini var. *acuminata* Mortensen

U.S. National Museum Bulletin 199, vol. 14, pt. 3, p. 138, 1948.

Paratype:

USNM E9309 (1 dry), *Albatross* Sta. 5164, Observation Island, Tawi Tawi, 5°01'40"N., 119°52'20"E., 18 fms., Feb. 24, 1908.

Lovenia grisea A. Agassiz and H. L. Clark

Bulletin of the Museum of Comparative Zoology at Harvard, vol. 50, no. 8, p. 255, 1907.

Holotype:

USNM E828 (dry), *Albatross* Sta. 4080, off Puniawa Point, Maui, Hawaii, 178-202 fms., July 21, 1902.

Lytechinus anamesus H. L. Clark

Memoirs of the Museum of Comparative Zoology at Harvard, vol. 34, no. 4, p. 254, pl. 99, figs. 4-5; pl. 107, figs. 7-11, 1912.

Syntypes:

USNM 32660 (1 dry), *Albatross* Sta. 2930, Los Coronados Island, California, 32°25'N., 117°18'45"W., 60 fms., Jan. 26, 1889.

USNM 31129 (40 alcohol), *Albatross* Sta. 2930, see above.

USNM 31127 (2 alcohol), *Albatross* Sta. 2899, off Cerros Island, Lower California, 34°N., 120°23'W., 44 fms., May 5, 1889.

USNM 31128 (45 alcohol), *Albatross* Sta. 2907, off Point Conception, California, 34°24'N., 129°20'W., 44 fms., Jan. 8, 1889.

USNM 31131 (13 alcohol), *Albatross* Sta. 2939, off Wilmington, California, 33°36'N., 118°09'W., 27 fms., Feb. 5, 1889.

USNM 31132 (8 alcohol), *Albatross* Sta. 2942, off Wilmington, California, 33°38'N., 118°13'W., 20 fms., Feb. 5, 1889.

USNM 31133 (10 alcohol), *Albatross* Sta. 2978, off Anacapa Island, California, 33°59'N., 119°52'W., 46 fms., Feb. 12, 1889.

USNM 32658 (16 dry), *Albatross* Sta. 2922, off Cortez Bank, California, 32°27'N., 119°05'W., 47 fms., Jan. 17, 1889.

USNM 32662 (63 dry), *Albatross* Sta. 2931, Los Coronados Island, California, 32°25'N., 117°16'W., 34 fms., Jan. 26, 1889.

USNM 32663 (29 dry), *Albatross* Sta. 2931, see above.

USNM 32665 (33 dry), *Albatross* Sta. 2934, off San Diego, California, 32°33'N., 117°16'W., 36 fms., Jan. 26, 1889.

USNM 32668 (23 dry), *Albatross* Sta. 2938, off Wilmington, California, 33°35'N., 118°08'W., 47 fms., Feb. 5, 1889.

USNM 32672 (15 dry), *Albatross* Sta. 2945, off Santa Cruz Island, California, 34°N., 119°29'W., 30 fms., Feb. 6, 1889.

USNM 32675 (14 dry), *Albatross* Sta. 2966, off Santa Barbara, California, 34°20'N., 119°28'W., 30 fms., Feb. 11, 1889.

USNM 32681 (12 dry), *Albatross* Sta. 2978, see above.

USNM 32682 (2 dry), *Albatross* Sta. 2913, Cortez Bank, California, 32°25'N., 119°03'W., 26 fms., Jan. 16, 1889.

USNM 32683 (1 dry), *Albatross* Sta. 2930, see above.

USNM 32684 (1 dry), *Albatross* Sta. 2932, Los Coronados Island, California, 32°26'N., 117°16'W., 20 fms., Jan. 26, 1889.

USNM 32685 (2 dry), *Albatross* Sta. 2951, off Santa Rosa Island, California, 33°55'N., 119°55'W., 48 fms., Feb. 8, 1889.

USNM 32686 (3 dry), *Albatross* Sta. 2967, off Santa Barbara Island, California, 34°21'N., 119°39'W., 30 fms., Feb. 11, 1889.

USNM 32687 (1 dry), *Albatross* Sta. 2975, off Santa Cruz Island, California, 34°01'N., 119°29'W., 36 fms., Feb. 12, 1889.

USNM 32688 (2 dry), *Albatross* Sta. 2983, northwest of Cerros Island, Lower California, 28°58'N., 118°15'W., 58 fms., Feb. 28, 1889.

USNM 32670 (14 dry), *Albatross* Sta. 2944, off Santa Cruz Island, California, 34°N., 119°28'W., 30 fms., Feb. 6, 1889.

MCZ 3916 (13 dry), *Albatross* Sta. 2930, off San Diego, California, 60 fms.

Lytechinus callipeplus H. L. Clark

Memoirs of the Museum of Comparative Zoology at Harvard, vol. 34, no. 4, p. 25, pl. 96, figs. 4-6, 1912.

*Holotype and Paratypes:

MCZ 1142 (3 dry), *Blake* Sta. 278, off Barbados, 69 fms.

Paratypes:

MCZ 1143 (4 dry), *Blake* Sta. 276, off Barbados, 94 fms.

MCZ 1144 (2 dry), *Blake* Sta. 177, off Dominica, 118 fms.

MCZ 1145 (3 dry), *Blake* Sta. 147, off Grenada, 170 fms.

MCZ 1935 (4 alcohol), same as 1142.

Lytechinus dyscritus H. L. Clark

Memoirs of the Museum of Comparative Zoology at Harvard, vol. 34, no. 4, p. 249, pl. 93, fig. 10; pl. 96, figs. 1-3, 1912.

Holotype:

MCZ 1146 (dry), Florida (exact locality not known).

Paratype:

MCZ 4734 (1 dry), same as 1146.

Mortensen (Monograph, vol. 3, no. 2, p. 435), stated that this is not a *Lytechinus*, but did not identify it further.

Lytechinus euerces H. L. Clark

Memoirs of the Museum of Comparative Zoology at Harvard, vol. 34, no. 4, p. 247, pl. 93, figs. 4-5; pl. 98, figs. 3-4; pl. 107, figs. 4-6, 1912.

Holotype:

MCZ 1155 (dry), *Blake* Sta. 29, south of western Cuba, 300 fms.

Paratypes:

MCZ 1154 (1 dry), *Blake* Sta. 139, off St. Cruz, 218 fms.,

MCZ 1938 (1 alcohol), south of Cuba, 300 fms.

*A note with these specimens indicates that the largest one is the holotype.

Macropneustes spatangoides A. Agassiz

Memoirs of the Museum of Comparative Zoology at Harvard, vol. 10, no. 1, p. 64, pl. 27, figs. 1-7, 1883.

= *Plethotaenia spatangoides* (Agassiz)--see Mortensen's Monograph of the Echinoidea, vol. 5, no. 2, p. 485.

Syntypes:

MCZ 3181 (1 dry), *Blake* Sta. 291, off Barbados, 200 fms.

MCZ 3182 (2 dry), *Blake* Sta. 134, off St. Cruz, 248 fms.

MCZ 3183 (2 dry), *Blake* Sta. 300, off Barbados, 82 fms.

Maretia alta A. Agassiz

Proceedings of the Academy of Natural Sciences, Philadelphia, p. 360, 1863.

= *Pseudomaretia alta* (Agassiz)--see Mortensen's Monograph of the Echinoidea, vol. 5, no. 2, p. 58.

Syntype:

MCZ 3210 (1 dry), Kagoshima Bay, Japan, W. Stimpson collection.

Maretia cordata Mortensen

U.S. National Museum Bulletin 100, vol. 14, pt. 3, p. 132, 1948.

Holotype:

USNM E7158 (dry), *Albatross* Sta. 5192, off north Cebu, Philippines, 11°09'15"N., 123°50'E., 32 fms., Apr. 3, 1908.

Paratypes:

USNM E9197 (1 dry), *Albatross* Sta. 5431, eastern Palawan, Philippines, 10°38'45"N., 120°12'45"E., 51 fms., Apr. 8, 1909.

USNM E9307 (1 dry), *Albatross* Sta. 5257, Bongo Island, Mindanao, 7°22'12"N., 124°12'15"E., 28 fms., May 22, 1908.

USNM E9461 (1 dry), *Albatross* Sta. 5104, China Sea, off Luzon, 14°45'48"N., 129°12'20"E., 33 fms., Jan. 8, 1908.

Maretia parvituberculata H. L. Clark

Fisheries and Marine Biological Survey. Union of South Africa, rep. 4, p. 13, pl. 4, 1924.

= *Eurypatagus parvituberculata* (Clark)--see Mortensen's Monograph of the Echinoidea, vol. 5, no. 1, p. 260.

Paratypes:

MCZ 4678 (1 dry), off Durban, Natal, 180 fms.

MCZ 4688 (1 alcohol), same as 4678.

Maretia peloria H. L. Clark

Endeavour Echinoderms. Department of Trade and Customs, Fisheries. Sydney, New South Wales, vol. 4, p. 121, pl. 44, figs. 1-3, 1916.

= *Paramaretia peloria* (Clark)--see Mortensen's Monograph of the Echinoidea, vol. 5, no. 2, p. 51.

Syntype:

MCZ 4278 (1 dry), *Endeavour* Sta. 2271, 26 miles south-southwest of Cape Everard, Victoria.

Maretia tuberculata A. Agassiz and H. L. Clark

Bulletin of the Museum of Comparative Zoology at Harvard, vol. 51, no. 5, p. 134, 1907.

Holotype:

USNM E916 (dry), *Albatross* Sta. 4875, eastern channel, Korea Strait, 34°19'N., 130°E., 59 fms., Aug. 2, 1906.

Meijerea excentrica A. Agassiz and H. L. Clark

Bulletin of the Museum of Comparative Zoology at Harvard, vol. 50, no. 8, p. 252, 1907.

= *Argopatus vitreus* Agassiz--Mortensen's Monograph of the Echinoidea, vol. 5, no. 1, p. 223.

Holotype:

USNM E830 (dry, broken), *Albatross* Sta. 4039, off Kawaihae Light, Hawaii, 670-697 fms., July 10, 1902.

Meijerea plana A. Agassiz and H. L. Clark

Bulletin of the Museum of Comparative Zoology at Harvard, vol. 51, no. 5, p. 132, 1907.

= *Argopatus planus* (Agassiz and Clark)--see Mortensen's Monograph of the Echinoidea, vol. 5, no. 1, p. 225.

Holotype:

USNM E904 (dry, broken), *Albatross* Sta. 4919, off Kagoshima Gulf, Japan, 30°34'N., 129°19'30"E., 440 fms., Aug. 13, 1906.

Mellita lata H. L. Clark

Proceedings of the U.S. National Museum, vol. 89, no. 3099, p. 437, pl. 60, fig. 1; pl. 61, fig. 1; pl. 62, figs. 1-2, 1940.

Holotype:

USNM E5655 (dry), near Port Limon, Costa Rica, collected by George T. Kenly.

Paratypes:

USNM E1002 (2 dry), near Port Limon, Costa Rica, collected by George T. Kenly.

USNM E960 (2 dry), La Mancha, Vera Cruz, Mexico, gift from A. L. Herrera.

MCZ 2464 (3 dry), locality unknown.

Mortensen considers this a subspecies of *Mellita quinquesperforata*, rather than a distinct species (Monograph, vol. 4, no. 2, p. 425).

Mellita latiambulacra H. L. Clark

Proceedings of the U.S. National Museum, vol. 89, no. 3099, p. 439, pl. 62, figs. 3-6, 1940.

Holotype:

MCZ 2460 (dry), Cumana, Venezuela.

Paratypes:

USNM E535 (4 dry), Itajahy, St. Catherina, Brazil, July 1919.

USNM E536 (1 dry), coast of Sao Paulo, Brazil, July 1919.

MCZ 7569 (2 dry), Cumana, Venezuela.

MCZ 2462 (7 dry), Itabapuna, Brazil.

MCZ 2463 (2 dry), Bahia, Cauna Pregos, Itaparica, Brazil.

MCZ 3999 (1 dry), Manzanilla Beach, east coast of Trinidad.

MCZ 7242 (4 dry), east coast, Mayaro Bay, Trinidad.

Mortensen considered this a subspecies of *Mellita quinquesperforata*, rather than a distinct species (Monograph, vol. 4, no. 2, p. 425).

Mellita quinquesperforata var. *tenuis* H. L. Clark

Proceedings of the U.S. National Museum, vol. 89, no. 3099, p. 442, pl. 60, fig. 2; pl. 61, fig. 2, 1940.

Holotype:

USNM E5656 (dry), Sanibel Island, Florida, 3-4 ft., February 1929.

Paratypes:

USNM E3287 (1 dry), Tarpon Springs, Florida.

USNM 33240 (1 dry), Charlotte Harbor, Florida.

MCZ 2543 (6 dry), 2 miles outside Sanibel Island, Florida, 2-4 ft.

MCZ 7570 (1 dry), Tarpon Springs, Florida.

Mespilia globulus var. *pellocrica* H. L. Clark

Memoirs of the Museum of Comparative Zoology at Harvard, vol. 34, no. 4, p. 322, 1912.

Syntypes:

MCZ 1507 (1 dry), Samoa.

MCZ 1508 (1 dry), Suva Reef, Viti Levu, Fiji, Dec. 24, 1897.

MCZ 1509 (1 dry), Ponape, Caroline Islands.

MCZ 1016 (1 dry), same as 1507.

MCZ 1913 (1 alcohol), Bohol, Philippines.

Metalia dicrana H. L. Clark

Memoirs of the Museum of Comparative Zoology at Harvard, vol. 46, no. 2, p. 211, pl. 146, fig. 16; pl. 160, figs. 1-4, 1917.

Holotype:

MCZ 3152 (dry), Bohol, Philippines, 2 fms.

Paratypes:

MCZ 3153 (1 dry), Nadronga Harbor, Viti Levu, Fiji.

MCZ 4360 (1 dry), Pelew Islands (exact locality not known).

Microcyphus excentricus Mortensen

U.S. National Museum Bulletin 100, vol. 14, pt. 1, p. 47, 1940.

Holotype:

USNM E5675 (dry) *Albatross*, reef, Pangasian Island, Jolo, Feb. 13, 1908.

Micropetalon purpureum A. Agassiz and H. L. Clark

Bulletin of the Museum of Comparative Zoology at Harvard, vol. 50, no. 8, p. 251, 1907.

Holotype:

USNM 32452 (dry), *Albatross* Sta. 3847, south coast of Molokai, Hawaii, 23-24 fms., Apr. 8, 1902.

Micropyga tuberculata A. Agassiz

Proceedings of the American Academy of Arts and Sciences, vol. 14, p. 200, 1879.

Syntypes:

MCZ 693 (2 dry), off Cebu, Philippines, 100 fms., *Challenger* collection.

MCZ 745 (1 alcohol), same as 693.

MCZ 4705 (1 alcohol), same as 693.

Moira lachesis Mortensen

Annotationes Zoologicae Japonenses, vol. 12, p. 389, pl. 2, figs. 1-7; pl. 3, figs. 5-8; pl. 4, figs. 1-14, 1930.

= *Moira lachesinella* --see Mortensen's Monograph of the Echinoidea, vol. 5, no. 2, p. 334.

Paratype:

MCZ 5045 (2 dry), Hakata Bay, Japan, February 1927.

Moira stygia A. Agassiz

Bulletin of the Museum of Comparative Zoology at Harvard, vol. 3, p. 58, 1872.

Syntype:

MCZ 3037 (1 dry), Red Sea (exact locality not known).

Nacospatangus depressus H. L. Clark

Memoirs of the Museum of Comparative Zoology at Harvard, vol. 46, no. 2, p. 150, pl. 145, figs. 40-43, 1917.

Syntype:

USNM E914 (1 dry), *Albatross* Sta. 2922, off southern California, 32°27'N., 119°05'W., 47 fms., Jan. 17, 1902.

Nacospatangus gracilis A. Agassiz

Bulletin of the Museum of Comparative Zoology at Harvard, vol. 3, p. 189, 1873.

Syntypes:

MCZ 3243 (5 alcohol), Juan Fernandez, 65 fms., *Hassler* Expedition.

Notechinus marionis Mortensen

Discovery Reports, vol. 12, p. 221, pl. 2, figs. 5-10; pl. 9, figs. 1-4, 1936.

= *Pseudechinus marionis* (Mortensen)--see Mortensen's Monograph of the Echinoidea, vol. 3, no. 2, p. 236.

Syntypes:

MCZ 7596 (2 dry), off Marion Island, *Discovery* Sta. 1564.

Notechinus novaezealandiae Mortensen

Videnskabelige Meddelelser fra den naturhistoriske Forening i Kjobenhavn, bd. 73, p. 153, pl. 6, figs. 7-10; pl. 7, figs. 4-5, 1921.

= *Pseudechinus novaezealandiae* (Mortensen)--see Mortensen's Monograph of the Echinoidea, vol. 3, no. 2, p. 237.

Syntype:

MCZ 4987 (1 dry), Foveaux Strait, New Zealand, 22 fms., 1915.

Notocidaris gaussensis Mortensen

Echinoidea der deutsche Sudpolar Expedition, p. 18, 1909.

Syntypes:

MCZ 2023 (1 dry), *Gauss* Winter Station, Antarctica, 195-212 fms.

MCZ 4863 (1 dry), off Antarctica, 195 fms.

Nudechinus scotiopremnus H. L. Clark

Memoirs of the Museum of Comparative Zoology at Harvard, vol. 34, no. 4, p. 277, pl. 97, figs. 4-6, 1912.

Holotype and Paratype:

MCZ 1209 (2 dry--largest is holotype), Suez.

Paratype:

MCZ 1210 (1 dry), New Zealand (exact locality not known).

Nudechinus stictus H. L. Clark

Memoirs of the Museum of Comparative Zoology at Harvard, vol. 34, no. 4, p. 279, pl. 93, fig. 1; pl. 97, figs. 1-3, 1912.

Holotype:

MCZ 1211 (dry), Sulu Archipelago, 7-8 fms., *Siboga* collection.

Palaeobrissus hilgardi A. Agassiz

Memoirs of the Museum of Comparative Zoology at Harvard, vol. 10, no. 1, p. 56, pl. 24, figs. 6-15, 1883.

Syntypes:

MCZ 2833 (3 dry), *Blake* Sta. 300, off Barbados, 82 fms.

MCZ 2834 (1 dry), *Blake* Sta. 295, off Barbados, 185 fms.

Palaeopneustes cristatus A. Agassiz

Bulletin of the Museum of Comparative Zoology at Harvard, vol. 3, p. 188, 1873.

Syntype:

MCZ 2808 (2 alcohol), off Barbados, 100 fms., *Hassler* Expedition.

Palaeopneustes hystrix A. Agassiz

Bulletin of the Museum of Comparative Zoology at Harvard, vol. 8, p. 82, 1880.

= *Archaeopneustes hystrix* (Agassiz)--see Mortensen's Monograph of the Echinoidea, vol. 5, no. 1, p. 195.

Syntypes:

MCZ 2812 (1 dry), *Blake* Sta. 157, off Montserrat, 120 fms.

MCZ 2813 (2 dry), *Blake* Sta. 144, off Guadeloupe, 878 fms.

MCZ 2815 (1 alcohol), same as 2812.

MCZ 2790 (1 dry), same as 2812.

Palaeopneustes murrayi A. Agassiz

Proceedings of the American Academy of Arts and Sciences, vol. 14, p. 219, 1879.

= *Linopneustes murrayi* (Agassiz)--see Mortensen's Monograph of the Echinoidea, vol. 5, no. 1, p. 206.

Syntypes:

MCZ 2825 (2 dry), *Challenger* Sta. 232, Sagami Bay, Japan, 343 fms.

Palaeopneustes niasicus Doderlein

Zoolischer Anzeigen, vol. 23, p. 22, 1901.

= *Heterobrissus niasicus* (Doderlein)--see Mortensen's Monograph of the Echinoidea, vol. 5, no. 1, p. 201.

Syntype:

MCZ 2817 (1 dry), between Nias and Sumatra, 0°15'N., 98°04'E., 261 fms., *Valdivia* collection.

Palaeopneustes spectabilis de Meijere

Tijdschrift Nederland Dierk Vereen. (2), vol. 8, p. 11, 1902.

= *Linopneustes spectabilis* (de Meijere)--see Mortensen's Monograph of the Echinoidea, vol. 5, no. 1, p. 213.

Syntype:

MCZ 2818 (dry), off Makassar, Celebes, 250 fms., *Siboga* Sta. 717.

Palaeotropus loveni A. Agassiz

Proceedings of the American Academy of Arts and Sciences, vol. 14, p. 204, 1879.

= *Palaeotrema loveni* (Agassiz)--see Mortensen's Monograph of the Echinoidea, vol. 5, no. 1, p. 300.

Syntypes:

MCZ 2830 (5 dry), *Challenger* Sta. 210, off Negros, Philippines, 375 fms.

MCZ 2831 (9 alcohol), same as 2830.

MCZ 2788 (1 dry), same as 2830.

Palaeotropus thomsoni A. Agassiz

Bulletin of the Museum of Comparative Zoology at Harvard, vol. 8, p. 80, 1880.

Holotype:

MCZ 2832 (dry), *Blake* Sta. 321, off South Carolina, 32°45'25"N., 77°20'30"W., 233 fms.

Mortensen (Monograph, vol. 5, no. 1, p. 299) stated that this cannot be a *Palaeotropus*, but is probably a "*Rhinobrissus*."

Paracentrotus grandis H. L. Clark

Annals of the South African Museum, vol. 13, p. 388, 1923.

= *Polyechinus agulhensis* (Doderlein)--see Mortensen's Monograph of the Echinoidea, vol. 3, no. 3, p. 118.

Paratype:

MCZ 4503 (1 dry), southeast of Cape Agulhas, Cape Colony, 36°49'S., 21°14'E., 560 fms., *Pieter Faure*, 1920.

Parasalenia gratiosa A. Agassiz

Bulletin of the Museum of Comparative Zoology at Harvard, vol. 1, p. 22, 1863.

Syntypes:

MCZ 1769 (1 dry), Gilbert Islands.

MCZ 1039 (1 dry), Gilbert Islands.

MCZ 2095 (1 alcohol), Gilbert Islands.

Parasalenia gratiosa var. *boninensis* Mortensen

Annotationes Zoologicae Japonenses, vol. 12, p. 388, pl. 1, figs. 2-5, 1930.

Syntype:

MCZ 7584 (1 dry), Bonin Island.

Parechinus angulosus var. *pallidus* H. L. Clark

Annals of the South African Museum, vol. 13, p. 386, 1923.

Syntypes:

MCZ 4490 (6 dry), *Pieter Faure* Sta. 14642, off Saldanha Bay, Cape Colony, 2 fms.

MCZ 4521 (2 alcohol), same as 4490.

Periaster fragilis A. Agassiz and H. L. Clark

Bulletin of the Museum of Comparative Zoology at Harvard, vol. 51, no. 5, p. 138, 1907.

= *Hypselaster fragilis* (Agassiz and Clark)--see H. L. Clark, 1917, p. 189; also, Mortensen's Monograph of the Echinoidea, vol. 5, no. 2, p. 321.

Holotype:

USNM E794 (dry), *Albatross* Sta. 4913, southwest of Koshika Island, Japan, 31°39'10"N., 129°22'30"E., 391 fms., Aug. 11, 1906.

Periaster maximus A. Agassiz and H. L. Clark

Bulletin of the Museum of Comparative Zoology at Harvard, vol. 50, no. 8, p. 259, 1907.

= *Hypselaster maximus* (Agassiz and Clark)--see H. L. Clark, 1917, p. 186; also, Mortensen's Monograph of the Echinoidea, vol. 5, no. 2, p. 321.

Holotype:

USNM E796 (dry, fragment), *Albatross* Sta. 4139, off Hanamaulu, Kauai, Hawaii, 283-309 fms., Aug. 1, 1902.

Periaster rotundus A. Agassiz and H. L. Clark

Bulletin of the Museum of Comparative Zoology at Harvard, vol. 51, no. 5, p. 138, 1907.

= *Hypselaster rotundus* (Agassiz and Clark)--see H. L. Clark, 1917, p. 187; also, Mortensen's Monograph of the Echinoidea, vol. 5, no. 2, p. 315.

Holotype:

USNM E795 (dry), *Albatross* Sta. 4946, between Kagoshima and Kobe, Japan, 31°29'10"N., 130°34'30"E., 39 fms., Aug. 20, 1906.

Periaster tenuis A. Agassiz

Bulletin of the Museum of Comparative Zoology at Harvard, vol. 32, p. 82, pl. 11, figs. 6-7, 1898.

= *Hemiaster tenuis* (Agassiz)--see Mortensen's Monograph of the Echinoidea, vol. 5, no. 1, p. 390.

Syntypes:

MCZ 2850 (3 dry), *Albatross* Sta. 3398, off Galera Point, Ecuador, 1°7'N., 80°21'W., 1,573 fms.

MCZ 2851 (1 dry), *Albatross* Sta. 3399, off Galera Point, Ecuador, 1,740 fms.

MCZ 2852 (1 alcohol), same as 2850.

Pericosmus melanostomus Mortensen

U.S. National Museum Bulletin 100, vol. 14, pt. 3, p. 119, 1948.

Holotype:

USNM E7153 (dry), *Albatross* Sta. 5302, China Sea, near Hongkong, 21°42'N., 114°50'E., 38 fms., Aug. 9, 1908.

Peronella ludwigii Pfeffer

Verhandland Naturwissenschaft Vereins Hamburg, p. 61, fig. 3, 1880.
= *Peronella orbicularis*--see Mortensen's Monograph of the Echinoidea, vol. 4, no. 2, p. 286.

Syntype:

MCZ 7546 (1 dry), Quinhon, Annam.

Phormosoma bursarium A. Agassiz

Challenger Echinoidea, p. 99, pl. 10, 1881.

Syntype:

MCZ 837 (1 dry), *Challenger* Sta. 200, off Mindanao, 255 fms.

Phormosoma hispidum A. Agassiz

Bulletin of the Museum of Comparative Zoology at Harvard, vol. 32, no. 5, p. 77, pls. 6, 7, 1898.

= *Tromikosoma hispidum* (Agassiz)--see Mortensen's Monograph of the Echinoidea, vol. 2, p. 178.

Syntypes:

MCZ 857 (1 dry), *Albatross* Sta. 3413, north of Galapagos, 1,360 fms.

MCZ 858 (3 dry), *Albatross* Sta. 3376, south of Malpelo Island, 1,132 fms.

MCZ 859 (3 dry), *Albatross* Sta. 3392, southeast of Cape Mala, 1,270 fms.

MCZ 860 (2 dry), *Albatross* Sta. 3362, east of Cocos Island, 1,175 fms.

MCZ 861 (1 dry), *Albatross* Sta. 3375, south of Malpelo Island, 1,201 fms.

MCZ 862 (3 dry), *Albatross* Sta. 3400, east of Galapagos, 1,322 fms.

MCZ 863 (1 dry), *Albatross* Sta. 3431, off Attata, Gulf of California, 995 fms.

MCZ 806 (1 dry), same as 859.

MCZ 807 (1 dry), same as 859.

MCZ 934 (4 alcohol), same as 859.

MCZ 935 (3 alcohol), same as 858.

Phormosoma indicum Doderlein

Zoologischer Anzeiger, vol. 28, p. 621, 1905.

= *Phormosoma bursarium* (Agassiz)--see Mortensen's Monograph of the Echinoidea, vol. 2, p. 135.

Syntypes:

MCZ 842 (1 dry), Pemba Channel, East Africa, 5°24'S., 39°20'E., 455 fms., *Valdivia* collection.

MCZ 915 (2 alcohol), same as 842.

Phormosoma panamense A. Agassiz

Bulletin of the Museum of Comparative Zoology at Harvard, vol. 32, no. 5, p. 77, 1898.

= *Tromikosoma panamense* (Agassiz)--see Mortensen's Monograph of the Echinoidea, vol. 2, p. 180.

Syntype:

MCZ 869 (1 dry), *Albatross* Sta. 3374, southwest of Malpelo Island, 1,823 fms.

Phormosoma petersii A. Agassiz

Bulletin of the Museum of Comparative Zoology at Harvard, vol. 5, no. 9, p. 76, 1880.

= *Hygrosoma petersii* (Agassiz)--see Mortensen's Monograph of the Echinoidea, vol. 2, p. 202.

Syntypes:

MCZ 870 (1 dry), *Blake* Sta. 343, south of Martha's Vineyard, 732 fms.

MCZ 871 (1 dry), *Blake* Sta. 268, off Grenada, 955 fms.

MCZ 964 (1 dry), *Blake* Sta. 325, off South Carolina.

MCZ 938 (2 alcohol), *Blake* Sta. 111, southwest from Cape Maysi, Cuba, 1,200 fms.

MCZ 939 (1 alcohol), *Blake* Sta. 197, off Martinique, 1,224 fms.

Phormosoma placenta Wyville-Thomson

Proceedings of the Royal Society, vol. 15, p. 494, 1872.

Syntype:

MCZ 847 (dry fragments), *Porcupine* collection, no locality given.

Phormosoma sigsbei A. Agassiz

Bulletin of the Museum of Comparative Zoology at Harvard, vol. 5, no. 9, p. 75, 1880.

= *Phormosoma placenta* Wyville-Thomson--see Mortensen's Monograph of the Echinoidea, vol. 3, p. 125.

Syntypes:

MCZ 852 (4 dry), *Blake* Sta. 269, off Grenada, 291 fms.

MCZ 853 (1 dry), *Blake* Sta. 248, off Grenada, 161 fms.

MCZ 855 (2 dry), *Blake* Sta. 148, off St. Kitts, 208 fms.

MCZ 803 (2 dry), same as 852.

MCZ 804 (2 dry), Grenada, 159 fms.

MCZ 919 (1 alcohol), *Blake* Sta. 135, off St. Cruz, 450 fms.

MCZ 920 (8 alcohol), *Blake* Sta. 260, off Grenada, 291 fms.

- MCZ 921 (5 alcohol), *Blake* Sta. 147, off St. Kitts, 250 fms.
- MCZ 922 (1 alcohol), *Blake* Sta. 139, off St. Cruz, 451 fms.
- MCZ 923 (1 alcohol), *Blake* Sta. 226, off St. Vincent, 424 fms.
- MCZ 924 (2 alcohol), *Blake* Sta. 129, off St. Cruz, 314 fms.
- MCZ 926 (1 alcohol), *Blake* Sta. 227, off St. Vincent, 573 fms.
- MCZ 927 (1 alcohol), *Blake* Sta. 192, off Dominica, 138 fms.
- MCZ 928 (1 alcohol), *Blake* Sta. 246, off Grenada, 154 fms.
- MCZ 929 (8 alcohol), *Blake* Sta. 153, off Montserrat, 303 fms.
- MCZ 930 (1 alcohol), *Blake* Sta. 150, off Nevis, 375 fms.
- MCZ 931 (7 alcohol), *Blake* Sta. 154, off Montserrat, 298 fms.
- MCZ 932 (4 alcohol), *Blake* Sta. 258, off Grenada, 159 fms.
- MCZ 933 (8 alcohol), *Blake* Sta. 148, off St. Kitts, 208 fms.

Phormosoma tenuis A. Agassiz

Proceedings of the American Academy of Arts and Sciences, vol. 14, p. 292, 1879.

= *Tromikosoma tenue* (Agassiz)--see Mortensen's Monograph of the Echinoidea, vol. 2, p. 171.

Syntype:

MCZ 872 (1 dry), *Challenger* Sta. 237, off Yokahama, Japan, 1,875 fms.

Phrysocystis aculeata A. Agassiz

Bulletin of the Museum of Comparative Zoology at Harvard, vol. 32, p. 89, pl. 12, figs. 1-7, 1898.

Syntypes:

MCZ 2839 (3 dry), *Albatross*, near Cocos Island, 5°30'N., 86°45'W., 1,067 fms.

Phrissocystis multispina A. Agassiz and H. L. Clark

Bulletin of the Museum of Comparative Zoology at Harvard, vol. 50, no. 8, p. 252, 1907.

Syntypes:

USNM E835 (dry spines), Hawaii, *Albatross*, 1902.

USNM E930 (dry fragments), see above.

USNM 4321 (1 dry), Hawaii (exact locality not known).

USNM 4398 (1 alcohol), same as 4321.

Phyllacanthus magnificus H. L. Clark

Records of the Western Australian Museum, vol. 1, p. 158, pl. 26, 1914.

Syntype:

MCZ 3900 (1 dry), near Freemantle, Western Australia, 1912.

Phyllacanthus thomasi A. Agassiz and H. L. Clark

Memoirs of the Museum of Comparative Zoology at Harvard, vol. 34, no. 1, p. 15, pls. 27-29, 1907.

= *Actinocidaris thomasi* (Agassiz and Clark)--see Mortensen's Monograph of the Echinoidea, vol. 1, p. 412.

Lectotype and Syntype:

USNM 27311 (2 dry), *Albatross* Sta. 4046, west coast of Hawaii, 71-147 fms., July 11, 1902. Large specimen is the lectotype, designated by Mortensen (Monograph, vol. 1, p. 412).

USNM 27310 (1 dry), *Albatross* Sta. 4062, northeast coast of Hawaii, 83-113 fms., July 18, 1902.

USNM 27312 (1 dry), *Albatross* Sta. 3838, south coast of Molokai, Hawaii, 92-212 fms., Apr. 4, 1902 (= *Stylocidaris rufa*, see Mortensen, op. cit.).

USNM 27313 (1 dry), *Albatross* Sta. 3863, between Molokai and Maui, Hawaii, 127-154 fms., Apr. 10, 1902.

USNM 27409 (1 alcohol), *Albatross* Sta. 3863, see above.

USNM 27446 (1 alcohol), *Albatross* Sta. 3823, south of Molokai, Hawaii, 78-222 fms., Apr. 1, 1902.

USNM 27447 (1 alcohol), *Albatross* Sta. 4062, see above.

MCZ 315 (1 dry), *Albatross* Sta. 4046, see above.

MCZ 316 (1 dry), *Albatross* Sta. 4062, see above.

MCZ 281 (1 alcohol), *Albatross* Sta. 4062, see above.

MCZ 480 (1 dry), *Albatross* Sta. 3863, see above.

Plagiobrissus pacificus H. L. Clark

Zoologica, vol. 25, p. 351, pl. 2, figs. 3-4, 1940.

= *Plagiobrissus* (*Rhabdobrissus*) *pacificus* Clark--see Mortensen's Monograph of the Echinoidea, vol. 5, no. 2, p. 502.

Holotype:

MCZ 7625 (dry), *Zaca* Sta. 224, Hannibal Bank, Panama, 34-40 fms., Mar. 20, 1938

Paratype:

MCZ 7647 (1 dry), same as 7625.

Plesiozonus diomedae Mortensen

U.S. National Museum Bulletin 100, vol. 14, pt. 3, p. 118, 1948.

Syntypes:

USNM E7151 (2 dry), *Albatross* Sta. 5520, northern Mindanao, 8°41'-15"N., 123°18'30"E., 102 fms., Aug. 10, 1909.

USNM E9450 (1 dry), *Albatross* Sta. 5242, Pujada Bay, Philippines, 6°51'53"N., 126°14'10"E., 191 fms., May 14, 1908.

USNM E10337 (4 dry), *Albatross* Sta. 5242, see above.

Pleurechinus dodderleinii Mortensen

Memoires de l'Academie Royale des Sciences et des Lettres de Denmark, ser. 7, t. 1, no. 1, p. 77, pl. 1, figs. 12-13; pl. 2, figs. 1, 7, 8; pl. 6, figs. 35, 43; pl. 7, figs. 10, 48, 1904.

= *Paratrema dodderleini* (Mortensen)--see Mortensen's Monograph of the Echinoidea, vol. 3, no. 2, p. 273.

Syntype:

MCZ 1490 (1 dry), Gulf of Siam, 6 fms.

Pleurechinus hawaiiensis A. Agassiz and H. L. Clark

Bulletin of the Museum of Comparative Zoology at Harvard, vol. 50, no. 8, p. 244, 1907.

= *Temnotrema hawaiiense* (Agassiz and Clark)--see Mortensen's Monograph of the Echinoidea, vol. 3, no. 2, p. 262.

Syntypes:

USNM 32858 (1 dry), *Albatross* Sta. 3978, near Bird Island, Hawaii, 32-46 fms., June 3, 1902.

USNM 31188 (1 alcohol), *Albatross* Sta. 3871, Auau Channel, between Maui and Lanai Islands, Hawaii, 13-43 fms., Apr. 12, 1902.

USNM 31189 (1 alcohol), *Albatross* Sta. 3978, see above.

USNM 32862 (1 dry), *Albatross* Sta. 3823, south coast of Molokai, Hawaii, 78-222 fms., Apr. 1, 1902.

USNM 32863 (3 dry), *Albatross* Sta. 3847, south coast of Molokai, Hawaii, 23-24 fms., Apr. 8, 1902.

USNM 32864 (1 dry), *Albatross* Sta. 3871, see above.

USNM 32865 (1 dry), *Albatross* Sta. 3872, Auau Channel, Hawaii, 32-43 fms., Apr. 12, 1902.

USNM 32866 (1 dry), *Albatross* Sta. 3876, Auau Channel, Hawaii, 28-43 fms., Apr. 14, 1902.

USNM 32867 (1 dry), *Albatross* Sta. 3962, Laysan Island, Hawaii, 16 fms., May 22, 1902.

USNM 32869 (1 dry), *Albatross* Sta. 4148, Bird Island, Hawaii, 26-33 fms., Aug. 5, 1902.

USNM 32870 (1 dry), *Albatross* Sta. 4150, Bird Island, Hawaii, 71-160 fms., Aug. 5, 1902.

MCZ 3928 (3 dry), *Albatross* Sta. 3957, off Modu Manu, Hawaii, 32-46 fms.

Pleurechinus maculatus Mortensen

Memoires de l'Academie Royale des Sciences et des Lettres de Denmark, ser. 7, t. 1, no. 1, p. 89, pl. 1, figs. 4, 14; pl. 2, fig. 5; pl. 6, figs. 20-44; pl. 7, fig. 17, 1904.

= *Temnotrema maculatum* (Mortensen)--see Mortensen's Monograph of the Echinoidea, vol. 3, no. 2, p. 265.

Syntype:

MCZ 4722 (1 dry), Macclesfield Bank, 46 fms.

Pleurechinus siamensis Mortensen

Memoires de l'Academie Royale des Sciences et des Lettres de Denmark, ser. 7, t. 1, no. 1, p. 79, pl. 1, figs. 2, 7, 11, 20; pl. 2, figs. 2, 9, 14, 15, 22; pl. 6, figs. 16, 36; pl. 7, figs. 14, 44, 53, 1904.

= *Temnotrema siamense* (Mortensen)--see Mortensen's Monograph of the Echinoidea, vol. 3, no. 2, p. 259.

Syntypes:

MCZ 1495 (1 dry), Gulf of Siam.

MCZ 4960 (1 dry), Koh Mesan, Gulf of Siam, 54 fms.

Plexechinus cinctus A. Agassiz

Bulletin of the Museum of Comparative Zoology at Harvard, vol. 32, p. 78, pl. 8, figs. 3-4, 1898.

Syntypes:

MCZ 2770 (2 dry), *Albatross* Sta. 3424, off Tres Marias, Mexico, 21°15'N., 106°23'W., 676 fms., 1891.

Plexechinus spectabilis Mortensen

U.S. National Museum Bulletin 100, vol. 14, pt. 3, p. 110, 1948.

Holotype:

USNM E7161 (dry), *Albatross* Sta. 5359, Jolo Sea, 8°12'45"N., 120°37'15"E., 2,275 fms., Jan. 9, 1909.

Paratype:

USNM E9189 (1 dry), *Albatross* Sta. 5359, see above.

Podocidaris ornata H. L. Clark

Memoirs of the Museum of Comparative Zoology at Harvard, vol. 34, no. 4, p. 381, pl. 102, fig. 1, 1912.

Holotype:

USNM 32827 (dry), *Albatross* Sta. 3919, south coast of Oahu, Hawaii, 220-257 fms., May 6, 1902.

Podocidaris sculpta A. Agassiz

Bulletin of the Museum of Comparative Zoology at Harvard, no. 9, p. 258, 1869.

Syntype:

MCZ 501 (1 dry), off southern Florida, 154 fms.

Podocidaris scutata A. Agassiz

Bulletin of the Museum of Comparative Zoology at Harvard, vol. 5, no. 9, p. 72, 1880.

= *Habrocidaris scutata* (Agassiz)--see Mortensen's Monograph of the Echinoidea, vol. 2, p. 550.

Holotype:

MCZ 503 (dry), Santa Cruz, 510 fms., *Blake* collection.

Porocidaris cobosi A. Agassiz

Bulletin of the Museum of Comparative Zoology at Harvard, vol. 32, p. 74, pl. 3, figs. 2-5, 1898.

= *Histocidaris cobosi* (Agassiz)--see Mortensen's Monograph of the Echinoidea, vol. 1, p. 84.

Syntype:

MCZ 352 (8 dry), off Chatham Island, Galapagos, 385 fms.

Porocidaris milleri A. Agassiz

Bulletin of the Museum of Comparative Zoology at Harvard, vol. 32, p. 74, pl. 4, 1898.

= *Aporocidaris milleri* (Agassiz)--see Mortensen's Monograph of the Echinoidea, vol. 1, p. 110.

Syntypes:

MCZ 349 (5 dry), *Albatross* Sta. 3360, off Panama, 1,672 fms.

MCZ 350 (4 dry), *Albatross* Sta. 3381, off Panama, 1,772 fms.

MCZ 372 (9 alcohol), *Albatross* Sta. 3399, see above.

MCZ 373 (2 alcohol), *Albatross* Sta. 3381, see above.

Porocidaris purpurata Wyville-Thomson

Proceedings of the Royal Society of London, p. 493, 1872.

= *Poriocidaris purpurata* (Wyville-Thomson)--see Mortensen's Monograph of the Echinoidea, vol. 1, p. 104.

Syntype:

MCZ 252 (1 dry), northwest of Scotland, 500-600 fms., *Porcupine* collection.

Porocidaris sharreri A. Agassiz

Bulletin of the Museum of Comparative Zoology at Harvard, vol. 5, no. 9, p. 71, 1880.

= *Histocidaris sharreri* (Agassiz)--see Mortensen's Monograph of the Echinoidea, vol. 1, p. 86.

Syntypes:

MCZ 253 (1 dry), *Blake* Sta. 152, off St. Kitts, 122 fms.

MCZ 362 (1 alcohol), off Nevis, 356 fms. (= *Calocidaris micans*).

Porocidaris variabilis A. Agassiz and H. L. Clark

Memoirs of the Museum of Comparative Zoology at Harvard, vol. 34, no. 1, p. 32, pl. 16, fig. 1, 1907.

= *Histocidaris variabilis* (Agassiz and Clark)--see Mortensen's Monograph of the Echinoidea, vol. 1, pp. 56, 82.

Lectotype (designated by Mortensen, Monograph vol. 1, p. 82):

USNM 27357 (dry), *Albatross* Sta. 4116, off Kahuku Point, northwest coast of Oahu, Hawaii, 241-282 fms., July 25, 1902.

Syntypes:

USNM 27402 (2 alcohol), *Albatross* Sta. 4117, northwest of Oahu, Hawaii, 253-282 fms., July 25, 1902.

USNM 27420 (1 alcohol), *Albatross* Sta. 3918, off Diamond Head, Oahu, Hawaii, 257-294 fms., May 6, 1902.

USNM 27421 (1 alcohol), *Albatross* Sta. 4090, off Mokuhooniki, Hawaii, 304-308 fms., July 22, 1902.

USNM 27422 (1 alcohol), *Albatross* Sta. 4083, off Puniawa Point, Maui, Hawaii, 238-253 fms., July 21, 1902.

USNM 27423 (1 alcohol), *Albatross* Sta. 3883, off Mokuhooniki, Hawaii, 277-284 fms., Apr. 16, 1902.

USNM 27424 (1 alcohol), *Albatross* Sta. 3893, Kaiwi Channel, Hawaii, 220-346 fms., Apr. 19, 1902.

USNM 27425 (1 alcohol), *Albatross* Sta. 3865, off Mokuhooniki, Hawaii, 256-283 fms., Apr. 10, 1902.

USNM 27455 (1 alcohol), *Albatross* Sta. 4085, Maui, Hawaii, 267-283 fms., July 21, 1902.

USNM 27456 (1 alcohol), *Albatross* Sta. 4097, off Mokuhooniki, Hawaii, 286 fms., July 22, 1902.

MCZ 353 (3 dry), *Albatross* Sta. 4117, see above.

MCZ 376 (2 alcohol), *Albatross* Sta. 4081, off Punaina Point, Maui, Hawaii, 253-282 fms.

MCZ 478 (1 dry), *Albatross* Sta. 3918, see above.

MCZ 479 (1 dry), *Albatross* Sta. 3865, see above.

Pourtalesia carinata A. Agassiz

Proceedings of the American Academy of Arts and Sciences, vol. 14, p. 205, 1879.

= *Helgocystis carinata* (Agassiz)--see Mortensen's Monograph of the Echinoidea, vol. 5, no. 1, p. 151.

Syntype:

MCZ 2771 (1 dry), *Challenger* Sta. 157, Antarctic Ocean, southwest of Australia, 53°55'S., 108°35'E., 1,950 fms.

Pourtalesia hispida A. Agassiz

Proceedings of the American Academy of Arts and Sciences, vol. 14, p. 204, 1879.

Syntype:

MCZ 2773 (2 dry), *Challenger* Sta. 147, west of Crozet Islands, 46°16' S., 48°27' E., 1,600 fms.

Pourtalesia laguncula A. Agassiz

Proceedings of the American Academy of Arts and Sciences, vol. 14, p. 205, 1879.

Syntype:

MCZ 2776 (1 dry), *Challenger* Sta. 232, off Sagami Bay, Japan, 35°11'N., 139°28'E., 345 fms.

Pourtalesia lanneri A. Agassiz

Bulletin of the Museum of Comparative Zoology at Harvard, vol. 32, p. 77, pl. 8, figs. 1-2, 1898.

Syntypes:

MCZ 2777 (7 dry), *Albatross* Sta. 3431, Gulf of California, 23°59'N., 108°40'W., 995 fms.

MCZ 4307 (7 dry), same as 2777.

Pourtalesia wandeli Mortensen

Videnskabelige Meddelelser fra den naturhistoriske Forening i Kjøbenhavn, p. 241, 1905.

= *Pourtalesia miranda*--see H. L. Clark, 1917, p. 128.

Syntype:

MCZ 2778 (1 dry), *Ingolf* Sta. 36, west of Fredericksaab, Greenland, 61°31'N., 56°21'W., 143 fms.

Prionechinus depressus A. Agassiz and H. L. Clark

Bulletin of the Museum of Comparative Zoology at Harvard, vol. 50, no. 8, p. 244, 1907.

= Male of *Prionechinus sculptus*--see Mortensen's Monograph of the Echinoidea, vol. 3, no. 2, p. 292.

Lectotype (designated by Mortensen, Monograph, vol. 3, no. 3, p. 293):

USNM 32743 (dry), *Albatross* Sta. 4083, north coast of Maui, Hawaii, 238-253 fms., July 21, 1902.

Syntypes:

USNM 31207 (2 alcohol), *Albatross* Sta. 3818, south coast of Oahu, Hawaii, 293-295 fms., Mar. 31, 1902.

USNM 32712 (14 dry), *Albatross* Sta. 4086, north coast of Maui, Hawaii, 283-308 fms., July 21, 1902.

USNM 32713 (13 dry), *Albatross* Sta. 4088, Pailolo Channel, Hawaii, 297-306 fms., July 21, 1902.

USNM 32714 (4 dry), *Albatross* Sta. 4083, see above.

MCZ 3938 (2 dry), *Albatross* Sta. 4083, see above.

MCZ 3940 (3 dry), *Albatross* Sta. 4028, off Ukula Point, Kauai, Hawaii, 444-478 fms.

Prionechinus ruber A. Agassiz and H. L. Clark

Bulletin of the Museum of Comparative Zoology at Harvard, vol. 51, no. 5, p. 126, 1907.

= *Prionechinus forbesianus*--see Mortensen's Monograph of the Echinoidea, vol. 3, no. 2, p. 290.

Syntypes:

USNM 32711 (1 dry), *Albatross* Sta. 4967, between Kobe and Yokohama, Japan, 33°25'10"N., 135°37'20"E., 244-253 fms., Aug. 29, 1906.

MCZ 3941 (1 dry), *Albatross* Sta. 4933, off Kagoshima Gulf, Japan, 152 fms.

Prionechinus sculptus A. Agassiz and H. L. Clark

Bulletin of the Museum of Comparative Zoology at Harvard, vol. 50, no. 8, p. 243, 1907.

Lectotype (designated by Mortensen, Monograph vol. 3, no. 2, p. 293):

USNM 32703 (dry), *Albatross* Sta. 4093, north coast of Maui, Hawaii, 238-253 fms., July 21, 1902.

Syntypes:

USNM 32704 (3 dry), *Albatross* Sta. 4083, see above.

USNM 31208 (6 alcohol), *Albatross* Sta. 4039, west coast of Hawaii, 670-697 fms., July 10, 1902.

USNM 31209 (1 alcohol), *Albatross* Sta. 3818, south coast of Oahu, Hawaii, 293-254 fms., Mar. 31, 1902.

USNM 32705 (1 dry), *Albatross* Sta. 4086, north coast of Maui, Hawaii, 283-308 fms., July 31, 1902.

USNM 32706 (1 dry), *Albatross* Sta. 4087, northeast approach to Pailolo Channel, between Maui and Molokai, Hawaii, 306-308 fms., July 21, 1902.

USNM 32707 (36 dry), *Albatross* Sta. 4088, northeast approach to Pailolo Channel, between Maui and Molokai, Hawaii, 297-306 fms., July 21, 1902.

USNM 32708 (1 dry), *Albatross* Sta. 4115, northwest coast of Oahu, Hawaii, 195-241 fms., July 25, 1902.

MCZ 3942 (4 dry), *Albatross* Sta. 4083, see above.

MCZ 3943 (5 dry), *Albatross* Sta. 4088, see above.

Prionocidaris bispinosa var. *laevis* H. L. Clark

Memoirs of the Museum of Comparative Zoology at Harvard, vol. 40, p. 371, 1938.

Holotype:

MCZ 7075 (dry), Garden Island, near Freemantle, Western Australia, Apr. 25, 1914.

Protocentrotus annulatus Mortensen

Echinoiden de deutsche Sudpolar Expedition, p. 58, taf. 8, figs. 7-8; taf. 9, figs. 8, 10; taf. 14, figs. 3, 9, 1909.

= *Parechinus angulosus* (Leske)--see Mortensen's Monograph of the Echinoidea, vol. 3, no. 3, p. 149.

Syntypes:

MCZ 2027 (3 dry), Simane Bay, Cape of Good Hope.

Psammechinus pulcherrimus A. Agassiz

Proceedings of the Academy of Natural Sciences, Philadelphia, p. 357, 1863.

= *Hemicentrotus pulcherrimus* (Agassiz)--see Mortensen's Monograph of the Echinoidea, vol. 3, no. 3, p. 248.

Syntype:

MCZ 1752 (1 dry), Hakodate, Japan.

Pseudechinus hesperus H. L. Clark

Memoirs of the Museum of Comparative Zoology at Harvard, vol. 5, p. 395, pl. 27, fig. 1, 1938.

Holotype:

MCZ 7151 (dry), shore, Rottnest Island, Western Australia, Oct. 19, 1929.

Pseudolovenia hirsuta A. Agassiz and H. L. Clark

Bulletin of the Museum of Comparative Zoology at Harvard, vol. 50, no. 8, p. 255, 1907.

Syntypes:

USNM E834 (1 dry), *Albatross* Sta. 4083, off Puniawa Point, Maui, Hawaii, 238-253 fms., July 21, 1902.

USNM E781 (1 dry), *Albatross* Sta. 3836, Molokai, Hawaii, 238-255 fms., Apr. 3, 1902.

USNM E782 (dry fragments), *Albatross* Sta. 3836, see above.

USNM E907 (1 dry), *Albatross* Sta. 4036, off Kawaihae Light, Hawaii, 687-692 fms., July 10, 1902.

USNM E908 (1 dry), *Albatross* Sta. 3920, off Diamond Head, Oahu, Hawaii, 265-280 fms., May 6, 1902.

USNM E922 (1 dry), *Albatross* Sta. 4122, off Barber's Point, Oahu, Hawaii, 192-352 fms., July 26, 1902.

USNM E4731 (dry fragments), *Albatross* Sta. 3839, Molokai, Hawaii, 259-266 fms., Apr. 4, 1902.

USNM E4732 (dry fragments), *Albatross* Sta. 4028, Kauai, Hawaii, 444-478 fms., June 24, 1902.

MCZ 4374 (1 dry), *Albatross* Sta. 3839, see above.

MCZ 4375 (1 dry), *Albatross* Sta. 3865, Pailolo Channel, off Moku-hooniki Islet, Hawaii, 256-283 fms.

MCZ 4376 (1 dry), *Albatross* Sta. 4028, see above.

Psilocidaris echinulata Mortensen

U.S. National Museum Bulletin 100, vol. 6, pt. 4, p. 283, pl. 60, figs. 1-2; pl. 61, figs. 4-5; pl. 63, fig. 4; pl. 73, figs. 3-4; pl. 78, figs. 3-5, 1927.

Holotype:

USNM E1334 (dry), *Albatross* Sta. 5127, Nogas Island, near Panay, Sulu Sea, 10°02'45"N., 121°48'15"E., 1,751 meters, Feb. 4, 1908.

Pycnolampas oviformis A. Agassiz and H. L. Clark

Bulletin of the Museum of Comparative Zoology at Harvard, vol. 50, no. 8, p. 253, 1907.

Syntypes:

USNM E926 (1 dry), *Albatross* Sta., 3838, Molokai, Hawaii, 92-212 fms., Apr. 4, 1902.

USNM E927 (1 dry), *Albatross* Sta. 3890, Molokai, Hawaii, 71-283 fms., Apr. 18, 1902.

USNM E4743 (1 dry), *Albatross* Sta. 3838, see above.

MCZ 4319 (1 dry), *Albatross* Sta. 3838, see above.

MCZ 4320 (1 dry), *Albatross* Sta. 4044, off Kawaihae Light, Hawaii, 198-233 fms.

Pygorhynchus pacificus A. Agassiz

Bulletin of the Museum of Comparative Zoology at Harvard, vol. 1, p. 27, 1863.

= *Cassidulus pacificus* (Agassiz)--see Mortensen's Monograph of the Echinoidea, vol. 4, no. 1, p. 210.

Syntypes:

MCZ 2719 (15 dry), Acapulco, Mexico.

MCZ 2714 (3 dry), same as 2719.

MCZ 2751 (36 alcohol), same as 2719.

Rhinobrissus placopetalus A. Agassiz and H. L. Clark

Bulletin of the Museum of Comparative Zoology at Harvard, vol. 50, no. 8, p. 256, 1907.

= *Rhynobrissus placopetalus* (Agassiz established this genus in 1872, with the spelling *Rhynobrissus*. As he did not give the derivation of the name, either here or in his Revision of the Echini, and as there is no indication in his description that he had "rhinos" in mind, there is no justification for emending the spelling to *Rhinobrissus*).

Syntypes:

USNM E925 (1 dry), *Albatross* Sta. 4160, vicinity of Modu Manu, 31-39 fms., Aug. 7, 1902.

USNM E924 (1 dry), *Albatross* Sta. 4146, vicinity of Modu Manu, 23-26 fms., Aug. 5, 1902.

Mortensen (Monograph, vol. 5, no. 2, p. 489) considers this merely a young *Rhynobrissus pyramidalis*.

Rhopalocidaris hirsutispina var. *viridis* Mortensen

U.S. National Museum Bulletin 100, vol. 6, no. 4, p. 273, pl. 61, fig. 2; pl. 73, figs. 1-2; pl. 78, figs. 6-8, 1927.

Holotype:

USNM E1382 (alcohol), *Albatross* Sta. 5543, Tagolo Light, north Mindanao, 8°47'15"N., 123°35'E., 296 meters, Aug. 20, 1909.

Rhopalocidaris rosea Mortensen

Videnskabelige Meddelelser fra den naturhistoriske Forening i Kjobenhavn, bd. 85, p. 68, 1928.

Syntype:

MCZ 4861 (2 dry), Sagami Sea, Japan, 400 fms.

Rhynchocidaris triplopora Mortensen

Echinoiden de deutsche Sudpolar Expedition, p. 6, 1909.

Syntypes:

MCZ 2026 (1 dry), *Gauss* Winter Station, 195-212 fms.

MCZ 7553 (1 dry), same as 2026.

Rhynobrissus cuneus Cooke

Proceedings of the U.S. National Museum, vol. 107, no. 3379, p. 9, pl. 1, 1957.

Holotype:

USNM E8032 (dry), Fort Macon, North Carolina, shore, January 1956, collected by Maureen Downey.

Paratype:

USNM E8033 (1 alcohol), see above.

Rhynobrissus macropetalus H. L. Clark

Memoirs of the Museum of Comparative Zoology at Harvard, vol. 55, p. 434, pl. 28, figs. 8-9, 1938.

Holotype:

MCZ 7264 (dry), Broome, Western Australia, 1932.

Rhynobrissus micrasteroides A. Agassiz

Bulletin of the Museum of Comparative Zoology at Harvard, vol. 5, p. 192, 1879.

= *Neopneustes micrasteroides* (Agassiz)--see Mortensen's Monograph of the Echinoidea, vol. 5, no. 2, p. 364.

Holotype:

MCZ 3022 (dry), off Havana, Cuba, 175 fms., Sigsbee.

Rhynobrissus placopetalus A. Agassiz and H. L. Clark

Bulletin of the Museum of Comparative Zoology at Harvard, vol. 50, p. 256, 1907.

Paratype:

MCZ 4341 (1 dry), *Albatross* Sta. 4146, vicinity of Modu Manu, Hawaii, 23-26 fms.

Rhynobrissus pyramidalis A. Agassiz

Bulletin of the Museum of Comparative Zoology at Harvard, vol. 3, p. 58, 1872.

Syntype:

MCZ 3032 (1 dry), Linguin, China Sea.

Salenia cincta A. Agassiz and H. L. Clark

Bulletin of the Museum of Comparative Zoology at Harvard, vol. 51, no. 5, p. 116, 1907.

Syntypes:

USNM 27563 (2 dry), *Albatross* Sta. 4893, southwest of Goto Islands, Japan, 32°32'N., 128°32'50"E., 93-103 fms., Aug. 9, 1906.

USNM 27564 (1 dry), *Albatross* Sta. 4894, southwest of Goto Islands, Japan, 32°33'N., 128°32'10"E., 95 fms., Aug. 9, 1906.

USNM 27600 (1 alcohol), *Albatross* Sta. 4894, see above.

USNM 27601 (1 alcohol), *Albatross* Sta. 4934, off Kagoshima Gulf, Japan, 30°58'30"N., 130°32'E., 103-152 fms., Aug. 16, 1906.

USNM 27602 (2 alcohol), *Albatross* Sta. 4895, southwest of Goto Islands, Japan, 32°33'10"N., 130°37'30"E., 103 fms., Aug. 9, 1906.

USNM 27617 (1 alcohol), *Albatross* Sta. 4936, off Kagoshima Gulf, Japan, 30°54'50"N., 130°37'30"E., 103 fms., Aug. 16, 1906.

MCZ 773 (2 dry), *Albatross* Sta. 4893, see above.

MCZ 799 (1 alcohol), same as 773.

Salenia crassispina A. Agassiz and H. L. Clark

Bulletin of the Museum of Comparative Zoology at Harvard, vol. 50, no. 8, p. 234, 1907.

= *Salenocidaris crassispina* (Agassiz and Clark)--see Mortensen's Monograph of the Echinoidea, vol. 2, p. 365.

Holotype:

USNM 27558 (dry), *Albatross* Sta. 4045, off Kawaihae Light, west coast of Hawaii, 147-198 fms., July 11, 1902.

Salenia hastigera A. Agassiz

Proceedings of the American Academy of Arts and Sciences, vol. 14, p. 198, 1879.

= *Salenocidaris profundus* var. *occlusa* Mortensen--see Mortensen's Monograph of the Echinoidea, vol. 2, p. 358.

Syntypes:

MCZ 403 (5 dry), *Challenger* Sta. 335, north of Tristan de Cunha, 1,425 fms.

MCZ 407 (4 alcohol), same as 403.

MCZ 3546 (1 dry), same as 403.

Salenia miliaris A. Agassiz

Bulletin of the Museum of Comparative Zoology at Harvard, vol. 32, p. 74, pl. 2, figs. 2-4, 1898.

= *Salenocidaris miliaris* (Agassiz)--see Mortensen's Monograph of the Echinoidea, vol. 2, p. 358.

Syntypes:

MCZ 388 (1 dry), *Albatross* Sta. 3357, off Mariato Point, Colombia, 782 fms.

MCZ 389 (2 dry), *Albatross* Sta. 3360, off Cocos Island, 1,672 fms.

MCZ 390 (3 dry), *Albatross* Sta. 3362, off Cocos Island, 1,175 fms.

MCZ 391 (1 dry), *Albatross* Sta. 3380, off Malpelo Island, 899 fms.

MCZ 392 (2 dry), *Albatross* Sta. 3407, Galapagos Islands, 885 fms.

MCZ 393 (1 dry), *Albatross* Sta. 3411, Galapagos Islands, 1,189 fms.

MCZ 394 (2 dry), *Albatross* Sta. 3413, Galapagos Islands, 1,360 fms.

MCZ 395 (2 dry), locality unknown.

Salenia pattersoni A. Agassiz

Bulletin of the Museum of Comparative Zoology at Harvard, vol. 5, p. 187, pl. 5, 1878.

= *Salenia goesiana* Loven--see Mortensen's Monograph of the Echinoidea, vol. 2, p. 371.

Syntypes:

MCZ 396 (1 dry), off Havana, Cuba, 175 fms., *Blake* collection.

MCZ 415 (2 alcohol), same as 396.

MCZ 419 (1 alcohol), off Havana, Cuba, 242 fms., *Blake* collection.

MCZ 436 (3 alcohol), 22°9'30"N., 82°21'30"W., 242 fms., *Blake* collection.

MCZ 3856 (1 alcohol), off Havana, Cuba, 175 fms.

Salenia scrippsae Zullo and Allison

Palaeontology, vol. 7, pt. 2, p. 338, figs. 3a, b; 4c, d; 6d-g; pl. 56, figs. 1-3, 1964.

Paratype:

USNM E10546 (1 dry), *Horizon* Sta. UCMP B06555 (Expedition Downwind), near southwest end of Nasca Ridge, southeastern Pacific, 800 miles off Chile, 85°25'W., 25°44'S., 250-300 fms., Jan. 26, 1958.

Salenocidaris hastigera var. *acuminata* Mortensen

Videnskabelige Meddelelser fra den naturhistoriske Forening i Kjobenhavn, bd. 98, p. 166, 1934.

Holotype:

USNM E3295 (alcohol), *Albatross* Sta. 5614, Molucca Passage, 31'N., 125°58'45"E., 1,100 fms., Nov. 22, 1909.

Salenocidaris incrassata Mortensen

Videnskabelige Meddelelser fra den naturhistoriske Forening i Kjobenhavn, bd. 98, p. 166, 1934.

Holotype:

USNM E3294 (alcohol), *Albatross* Sta. 5601, Gulf of Tomini, Celebes, 1°13'10"N., 125°17'05"E., 765 fms., Nov. 13, 1909.

Salenocidaris varispina A. Agassiz

Bulletin of the Museum of Comparative Zoology at Harvard, vol. 1, p. 254, 1869.

Holotype:

MCZ 385 (dry), off Double-Head Shot Key, 315 fms., *Blake* collection.

Salmacis bicolor L. Agassiz and Desor

Catalogue Raisonne des Echini, p. 359, pl. 15, fig. 4, 1846.

Holotype:

MCZ 1464 (dry), Red Sea (exact locality not known).

Salmacis erythraxis H. L. Clark

Memoirs of the Museum of Comparative Zoology at Harvard, vol. 34, no. 4, p. 315, pl. 3, figs. 4-6, 1912.

= *Salmaciella erythraxis* (Clark)--see Mortensen's Monograph of the Echinoidea, vol. 3, no. 2, p. 144.

Holotype:

MCZ 1477 (dry), Zanzibar, collected by Captain Webb.

Salmacis oligopora H. L. Clark

Endeavour Echinoderms. Department of Trade and Customs: Fisheries. Sydney, New South Wales, vol. 4, p. 113, pl. 42, figs. 1-2; pl. 43, fig. 2, 1916.

= *Salmaciella oligopora* (Clark)--see Mortensen's Monograph of the Echinoidea, vol. 3, no. 2, 146.

Syntypes:

MCZ 4255 (1 dry), 6 miles east of Cape Hawke, New South Wales, 47-59 fms., *Endeavour* collection.

MCZ 4256 (1 dry), off Sandon Bluffs, New South Wales, 35-40 fms., *Endeavour* collection.

MCZ 4283 (2 alcohol), same as 4256.

Salmacis rubicincta H. L. Clark

Catalogue of recent sea urchins in the British Museum, p. 86, pl. 5, figs. 3-4, 1925.

Paratype:

MCZ 4720 (1 dry), Saya de Malha, Indian Ocean, 40 fms.

Salmacis rufa Bell

Proceedings of the Zoological Society of London, p. 411, 1894.

Syntype:

MCZ 4735 (2 dry), Macclesfield Bank, 30-40 fms.

Salmacopsis pulchellimus Yoshiwara

Annotationes Zoologicae Japonenses, vol. 2, p. 59, 1898.

= *Mespilia globulus*--see Mortensen's Monograph of the Echinoidea, vol. 3, no. 2, p. 178.

Syntype:

MCZ 3911 (1 dry), Tono (Bingo), Japan.

Scaphechinus mirabilis A. Agassiz

Proceedings of the Academy of Natural Sciences, Philadelphia, p. 359, 1863.

Syntypes:

MCZ 2518 (1 dry), Hakodate, Japan.

MCZ 2611 (1 alcohol), Hakodate, Japan.

Schizaster (Paraster) floridiensis Kier and Grant

Smithsonian Miscellaneous Collection, vol. 149, no. 6, p. 50, pl. 13, figs. 4-6; pl. 14, figs. 1-9; fig. 15, 1965.

Holotype:

USNM E19392 (dry), Sta. 17a Molasses Reef, Key Largo, Florida, 89 ft., August 1964, collected by Porter M. Kier.

Paratype:

USNM E10303 (3 dry), Sta. 30, between French Reef and White Bank, Key Largo, Florida, 5 ft., August 1964, collected by Porter M. Kier.

Schizaster latifrons A. Agassiz

Bulletin of the Museum of Comparative Zoology at Harvard, vol. 32, p. 81, 1898.

= *Brisaster latifrons* (Agassiz)--see Mortensen's Monograph of the Echinoidea, vol. 5, no. 2, p. 289.

Syntype:

MCZ 2951 (1 dry), *Albatross* Sta. 3431, Gulf of California, 23°59'N., 108°40'W., 995 fms.

Schizaster (Periaster) limicola A. Agassiz

Bulletin of the Museum of Comparative Zoology at Harvard, vol. 5, p. 193, pl. 3, 1878.

= *Hypselaster limicolus* (Agassiz)--see Mortensen's Monograph of the Echinoidea, vol. 5, no. 2, p. 314.

Syntype:

MCZ 2868 (1 dry), *Blake* Sta. 49, off the mouth of the Mississippi, 118 fms.

Schizaster moseleyi A. Agassiz

Proceedings of the American Academy of Arts and Sciences, vol. 14, p. 203, pl. 36, figs. 14-16, 1881.

= *Brisaster moseleyi* (Agassiz)--see Mortensen's Monograph of the Echinoidea, vol. 5, no. 2, p. 292.

Syntypes:

MCZ 2952 (2 dry), *Challenger* Sta. 309, off southern Chile, 50°56'S., 74°15'W., 40-140 fms.

MCZ 2955 (1 dry), *Challenger* Sta. 311, off southern Chile, 52°50'S., 73°53'W., 245 fms.

MCZ 2930 (2 dry), same as 2955.

MCZ 3232 (1 dry), *Challenger* Sta. 305, off southern Chile, 120 fms.

MCZ 3233 (3 alcohol), same as 2952.

MCZ 3234 (5 alcohol), same as 2955.

Some of the above specimens are undoubtedly *Tripylaster philippii*, as noted by Mortensen (Monograph, vol. 5, no. 2, p. 293).

Schizaster orbignyanus A. Agassiz

Bulletin of the Museum of Comparative Zoology at Harvard, vol. 8, p. 84, 1880.

Syntypes:

MCZ 2956 (1 dry), *Blake* Sta. 274, off Barbados, 209 fms.

MCZ 2957 (1 dry), *Blake* Sta. 247, off Grenada, 170 fms.

Schizaster townsendi A. Agassiz

Bulletin of the Museum of Comparative Zoology at Harvard, vol. 32, p. 82, 1898.

= *Brisaster townsendi* (Agassiz)--see Mortensen's Monograph of the Echinoidea, vol. 5, no. 2, p. 288.

Syntypes:

MCZ 2961 (6 dry), *Albatross* Sta. 3425, off Mexico, 21°19'N., 106°24'W., 680 fms.

MCZ 2962 (1 dry), *Albatross* Sta. 3436, Gulf of California, 27°3'40"N., 110°53'40"W., 905 fms.

MCZ 2963 (1 dry), *Albatross* Sta. 3437, Gulf of California, 27°31'40"N., 111°0'30"W., 628 fms.

MCZ 3236 (1 alcohol), *Albatross* Sta. 3394, Gulf of Panama, 511 fms.

MCZ 3237 (1 alcohol), *Albatross* Sta. 3424, near Tres Marias Island, Mexico, 676 fms.

Schizocidaris fasciata Mortensen

U.S. National Museum Bulletin 100, vol. 6, pt. 4, p. 280, 1927.

Holotype:

USNM E1387 (alcohol), *Albatross* Sta. 5547, Noble Point, Tulayan Island, near Jolo, 6°09'20"N., 121°13'40"E., 283 meters, Sept. 15, 1909.

Spatagocystis challengerii A. Agassiz

Proceedings of the American Academy of Arts and Sciences, vol. 14, p. 206, 1879.

Syntype:

MCZ 4755 (1 dry), *Challenger* Sta. 157, southeastern Indian Ocean, 1,950 fms.

Spatangus californicus H. L. Clark

Memoirs of the Museum of Comparative Zoology at Harvard, vol. 46, no. 2, p. 235, pl. 146, fig. 20; pl. 149, fig. 4; pl. 156, figs. 1-3; pl. 157, fig. 10, 1917.

Syntypes:

USNM E784 (1 dry), *Albatross* Sta. 2973, off Southern California, 34°19'30"N., 119°44'15"W., 68 fms., Feb. 11, 1889.

USNM E785 (1 dry), *Albatross* Sta. 2973, see above.

USNM E786 (1 dry), *Albatross* Sta. 2973, see above.

USNM E787 (1 dry), *Albatross* Sta. 2973, see above.

USNM E788 (1 dry), *Albatross* Sta. 2973, see above.

USNM E789 (1 dry), *Albatross* Sta. 2973, see above.

USNM E790 (1 dry), *Albatross* Sta. 2973, see above.

USNM E886 (dry fragments), *Albatross* Sta. 2977, off Southern California, 33°59'30"N., 119°25'30"W., 45 fms., Feb. 12, 1889.

USNM E887 (1 dry), *Albatross* Sta. 2977, see above.

USNM E4735 (2 dry), *Albatross* Sta. 2972, off Southern California, 34°18'30"N., 119°41'W., 61 fms., Feb. 11, 1889.

USNM E4749 (2 dry), *Albatross* Sta. 2972, see above.

MCZ 4365 (2 dry), *Albatross* Sta. 2972, off Southern California, 61 fms.

MCZ 4366 (1 dry), *Albatross* Sta. 2918, off Southern California, 61 fms.

MCZ 4367 (1 dry), *Albatross* Sta. 2974, off Southern California, 73 fms.

MCZ 4421 (2 alcohol), same as 4365.

Spatangus diomedae Fell

Zoology Publications, Victoria University of Wellington, New Zealand,
no. 32, p. 5, 1963.

Holotype:

USNM E9369 (dry), *Albatross* Sta. 5565, between Jolo and Tawi Tawi,
5°51'42"N., 120°30'30"E., 243 fms., Sept. 21, 1908.

Spatangus lutkeni A. Agassiz

Bulletin of the Museum of Comparative Zoology at Harvard, vol. 3,
p. 57, 1872.

Holotype:

MCZ 3168 (dry), Japan (exact locality not known).

Spatangus pallidus H. L. Clark

Bulletin of the Museum of Comparative Zoology at Harvard, vol. 51,
p. 307, 1908.

Holotype:

MCZ 3169 (dry), Sagami Bay, Japan, 35°11'N., 139°45'E., 50 fms.,
May 23, 1897.

Paratypes:

MCZ 3184 (1 dry), Sagami Bay, Japan, 25°3'N., 138°48'E., 75 fms.,
July 21, 1902.

MCZ 4369 (1 dry), same as 3169.

Spatangus paucituberculatus A. Agassiz and H. L. Clark

Bulletin of the Museum of Comparative Zoology at Harvard, vol. 50,
no. 8, p. 253, 1907.

Syntypes:

USNM E725 (1 dry), *Albatross* Sta. 3865, Pailolo Channel, Hawaii,
256-283 fms., Apr. 10, 1902.

USNM E883 (1 dry), *Albatross* Sta. 4096, Pailolo Channel, Hawaii,
272-286 fms., July 22, 1902.

USNM E884 (1 dry), *Albatross* Sta. 4096, see above.

USNM E4703 (dry fragments), *Albatross* Sta. 4097, Pailolo Channel,
Hawaii, 296 fms., July 22, 1902.

USNM E885 (dry fragments), *Albatross* Sta. 3863, Pailolo Channel, Hawaii, 127-154 fms., Apr. 10, 1902.

USNM E4750 (dry fragments), *Albatross* Sta. 4096, see above.

USNM E4751 (1 dry), *Albatross* Sta. 4996, see above.

MCZ 4370 (1 dry), *Albatross* Sta. 3865, see above.

MCZ 4371 (1 dry), *Albatross* Sta. 4116, off Kahuka Point, Oahu, Hawaii, 241-282 fms.

MCZ 4422 (1 alcohol), *Albatross* Sta. 4097, see above.

Sperosoma antillense Mortensen

Videnskabelige Meddelelser fra den naturhistoriske Forening i Kjobenhavn, bd. 98, p. 163, 1937.

Holotype:

MCZ 900 (dry), *Blake* Sta. 288, off Barbados, 399 fms.

Sperosoma crassispinum Mortensen

Videnskabelige Meddelelser fra den naturhistoriske Forening i Kjobenhavn, bd., 98, p. 163, 1934.

Holotype:

USNM E3288 (alcohol), *Albatross* Sta. 5615, Molucca Passage, Tifore Island, Celebes, 32°30'N., 126°31'30"E., 1,866 meters, Nov. 22, 1909.

Sperosoma obscurum A. Agassiz and H. L. Clark

Bulletin of the Museum of Comparative Zoology at Harvard, vol. 50, no. 8, p. 239, 1907.

Syntypes:

USNM 27849 (1 dry), *Albatross* Sta. 4139, off Hanamaulu, Hawaii, 283-309 fms., Aug. 1, 1902.

USNM 27628 (1 alcohol), *Albatross* Sta. 4131, Kauai, Hawaii, 257-309 fms., Aug. 1, 1902.

USNM 27629 (1 alcohol), *Albatross* Sta. 4137, off Hanamaulu, Kauai, Hawaii, 411-476 fms., Aug. 1, 1902.

USNM 27630 (1 alcohol), *Albatross* Sta. 4036, west coast of Hawaii, 687-692 fms., July 10, 1902.

USNM 27631 (2 alcohol), *Albatross* Sta. 4025, Kauai, Hawaii, 276-368 fms., June 23, 1902.

USNM 27632 (1 alcohol), *Albatross* Sta. 3988, Kauai, Hawaii, 165-469 fms., June 11, 1902.

USNM 27633 (1 alcohol), *Albatross* Sta. 4089, Kokuhooniki, Pailolo Channel, Hawaii, 297-304 fms., July 21, 1902.

USNM 27634 (5 alcohol), *Albatross* Sta. 4021, off Hanamaula, Kauai, Hawaii, 289-399 fms., June 21, 1902.

USNM 27635 (2 alcohol), *Albatross* Sta. 4134, off Hanamaula, Kauai, Hawaii, 225-324 fms., Aug. 1, 1902.

USNM 27636 (3 alcohol), *Albatross* Sta. 4112, Molokai, Hawaii, 433-447 fms., July 24, 1902.

USNM 27637 (2 alcohol), *Albatross* Sta. 4096, off Mokuhooniki, Pailolo Channel, Hawaii, 272-286 fms., July 22, 1902.

USNM 27848 (1 dry), *Albatross* Sta. 4136, off Hanamaulu, Kauai, Hawaii, 294-353 fms., Aug. 1, 1902.

USNM 27850 (1 dry), *Albatross* Sta. 3824, Molokai, Hawaii, 222-498 fms., Apr. 1, 1902.

USNM 27851 (1 dry), *Albatross* Sta. 4112, see above.

MCZ 901 (1 dry), *Albatross* Sta. 3865, between Maui and Molokai, Hawaii, 256-283 fms.

MCZ 902 (1 dry), *Albatross* Sta. 4117, off Kalauku Point, Oahu, Hawaii, 252-282 fms.

MCZ 903 (1 dry), *Albatross* Sta. 4015, off Hanamanhu, Kawai, Hawaii, 318-362 fms.

MCZ 808 (1 dry), same as 901.

MCZ 951 (1 alcohol), same as 901.

MCZ 952 (3 alcohol), *Albatross* Sta. 3978, off Modu Manu, Hawaii, 222-387 fms.

Sperosoma tristichum Mortensen

Videnskabelige Meddelelser fra den naturhistoriske Forening i Kjobenhavn, bd. 98, p. 163, 1934.

Holotype:

USNM E3289 (alcohol), *Albatross* Sta. 5585, Sipadan Island, Celebes, 4°07'N., 118°49'54"E., 660 meters, Sept. 28, 1909.

Sphaerechinus australiae A. Agassiz

Bulletin of the Museum of Comparative Zoology at Harvard, vol. 3, p. 55, 1872.

= *Pachycentrotus australiae* (Agassiz)--see Mortensen's Monograph of the Echinoidea, vol. 3, no. 3, p. 317.

Syntypes:

MCZ 1585 (2 dry), Australia (exact locality not known).

Stephanocidaris hawaiiensis A. Agassiz and H. L. Clark

Memoirs of the Museum of Comparative Zoology at Harvard, vol. 34, no. 1, p. 18, 1907.

= *Prionocidaris hawaiiensis* (Agassiz and Clark)--see Mortensen's Monograph of the Echinoidea, vol. 1, p. 468.

Syntypes:

USNM 27317 (3 dry), *Albatross* Sta. 3861, between Molokai and Maui, Hawaii, 30-52 fms., Apr. 10, 1902.

USNM 27321 (4 dry), *Albatross* Sta. 3846, south coast of Molokai, Hawaii, 60-64 fms., Apr. 8, 1902.

USNM 27316 (1 dry), *Albatross* Sta. 3955, Laysan, Hawaii, 20-30 fms., May 21, 1902.

USNM 27314 (1 dry), *Albatross* Sta. 3987, off Kauai, Hawaii, 50-55 fms., June 11, 1902.

USNM 27319 (1 dry), *Albatross* Sta. 4064, northeast coast of Hawaii, 63-107 fms., July 18, 1902.

USNM 27320 (1 dry), *Albatross* Sta. 4073, northeast coast of Maui, Hawaii, 69-78 fms., July 19, 1902.

USNM 27315 (1 dry), *Albatross* Sta. 4077, northeast coast of Maui, Hawaii, 99-106 fms., July 12, 1902.

USNM 27318 (2 dry), *Albatross* Sta. 4160, off Bird Island, vicinity of Modu Manu, Hawaii, 31-39 fms., Aug. 7, 1902.

USNM 27322 (1 dry), *Albatross* Sta. 3846, see above.

USNM 27412 (4 alcohol), *Albatross* Sta. 3846, see above.

USNM 27386 (21 alcohol), *Albatross* Sta. 3861, see above.

USNM 27449 (6 alcohol), *Albatross* Sta. 3845, south coast of Molokai, Hawaii, 60-64 fms., Apr. 8, 1902.

USNM 27380 (2 alcohol), *Albatross* Sta. 3872, between Maui and Lanai, Hawaii, 32-43 fms., Apr. 12, 1902.

USNM 27448 (1 alcohol), *Albatross* Sta. 3872, see above.

USNM 27384 (1 alcohol), *Albatross* Sta. 3876, between Maui and Lanai, Hawaii, 28-43 fms., Apr. 14, 1902.

USNM 27381 (2 alcohol), *Albatross* Sta. 3991, near Kauai, Hawaii, 272-296 fms., June 12, 1902.

USNM 27382 (3 alcohol), *Albatross* Sta. 3987, see above.

USNM 27383 (1 alcohol), *Albatross* Sta. 4054, Hilo Bay, northeast coast of Hawaii, 26-50 fms., July 16, 1902.

USNM 27385 (1 alcohol), *Albatross* Sta. 4057, northeast coast of Hawaii, 76-77 fms., July 16, 1902.

USNM 27410 (1 alcohol), *Albatross* Sta. 4073, see above.

USNM 27411 (12 alcohol), *Albatross* Sta. 4128, near Kauai, Hawaii, 68-253 fms., Aug. 1, 1902.

MCZ 319 (4 dry), *Albatross* Sta. 3845, see above.

MCZ 320 (2 dry), *Albatross* Sta. 3906, north coast of Molokai, Hawaii, 66 fms., May 1, 1902.

MCZ 321 (1 dry), *Albatross* Sta. 3872, see above.

MCZ 322 (1 dry), *Albatross* Sta. 3863, Pailolo Channel, between Molokai and Maui, Hawaii, 127 fms., Apr. 10, 1902.

MCZ 323 (3 dry), *Albatross* Sta. 3936, Laysan, Hawaii, 79-130 fms., May 16, 1902.

MCZ 324 (3 dry), *Albatross* Sta. 3849, south coast of Molokai, Hawaii, 43-73 fms., Apr. 8, 1902.

MCZ 325 (1 dry), *Albatross* Sta. 4046, west coast of Hawaii, 147 fms., July 11, 1902.

MCZ 326 (1 dry), *Albatross* Sta. 4066, northeast coast Hawaii, 176 fms., July 19, 1902.

MCZ 358 (2 alcohol), *Albatross* Sta. 3845, see above.

MCZ 359 (1 alcohol), *Albatross* Sta. 4027, vicinity of Kauai, Hawaii, 319 fms., June 24, 1902.

MCZ 481 (1 dry), *Albatross* Sta. 3846, see above.

MCZ 482 (3 dry), *Albatross* Sta. 3861, see above.

MCZ 357 (4 alcohol), *Albatross* Sta. 4161, vicinity of Modu Manu, Hawaii, 39 fms., Aug. 7, 1902.

Stereocidaris grandis var. *rubra* Mortensen

U.S. National Museum Bulletin 100, vol. 6, pt. 4, p. 301, pl. 68, figs. 1-2, 1927.

= *Stereocidaris granularis* var. *rubra*--see Mortensen's Monograph of the Echinoidea, vol. 1, p. 245.

Holotype:

USNM E1336 (dry), *Albatross* Sta. 5135, Jolo Light, Jolo Sea, 6°11'50"N., 121°08'20"E., 294 fms., Feb. 7, 1908.

Stereocidaris hawaiiensis Mortensen

Videnskabelige Meddelelser fra den naturhistoriske Forening i Kjobenhavn, bd. 85, p. 69, 1928

Holotype:

MCZ 334 (dry), *Albatross* Sta. 4044, west coast of Hawaii, 233 fms., July 11, 1902.

Stereocidaris indica var. *carinata* Doderlein
Zoologischer Anzeiger vol. 24, p. 19, 1901.

Syntype:

MCZ 755 (1 dry), off Somali Land, East Africa, 630 fms., *Valdiva* collection.

Stereocidaris ingolfiana Mortensen
Ingolf Echinoidea, vol. 1, p. 38, 1903.

Syntype:

MCZ 4852 (dry), west of Iceland, 310 fms.

Stereocidaris leucacantha A. Agassiz and H. L. Clark
Memoirs of the Museum of Comparative Zoology at Harvard, vol. 34,
no. 1, p. 23, pl. 15, figs. 3-4; pl. 32, figs. 5-6, 1907.

Syntypes:

USNM 27324 (1 dry), *Albatross* Sta. 3918, off Diamond Head, Oahu,
Hawaii, 257-294 fms., May 6, 1902.

USNM 27325 (2 dry), *Albatross* Sta. 3839, south coast of Molokai,
Hawaii, 259-266 fms., Apr. 4, 1902.

USNM 27326 (2 dry), *Albatross* Sta. 3835, south coast of Molokai,
Hawaii, 169-182 fms., Apr. 3, 1902.

USNM 27327 (1 dry), *Albatross* Sta. 4096, between Maui and Molokai,
Hawaii, 272-286 fms., July 22, 1902.

USNM 27328 (1 dry), *Albatross* Sta. 3912, off Diamond Head, Oahu,
Hawaii, 334 fms., May 5, 1902.

USNM 27329 (1 dry), *Albatross* Sta. 3918, see above.

USNM 27330 (1 dry), *Albatross* Sta. 3909, off Diamond Head, Oahu,
Hawaii, 308-322 fms., May 5, 1902.

USNM 27331 (1 dry), *Albatross* Sta. 3992, Kauai, Hawaii, 528 fms.,
June 12, 1902.

USNM 27388 (1 alcohol), *Albatross* Sta. 4117, northwest coast of Oahu,
Hawaii, 253-282 fms., July 25, 1902.

USNM 27389 (5 alcohol), *Albatross* Sta. 3865, off Mokuhooniki, Pailolo
Channel, Hawaii, 256-283 fms., Apr. 10, 1902.

USNM 27413 (3 alcohol), *Albatross* Sta. 3866, off Mokuhooniki, Hawaii,
283-284 fms., Apr. 10, 1902.

USNM 27451 (1 alcohol), *Albatross* Sta. 3893, Kaiwi Channel, Hawaii,
220-346 fms., Apr. 19, 1902.

USNM 27452 (4 alcohol), *Albatross* Sta. 3835, see above.

USNM 27453 (2 alcohol), *Albatross* Sta. 3917, south of Oahu, Hawaii, 284-339 fms., May 6, 1902.

MCZ 336 (3 dry), *Albatross* Sta. 3835, see above.

MCZ 337 (1 dry), *Albatross* Sta. 4116, northwest coast of Oahu, Hawaii, 241 fms., July 25, 1902.

MCZ 338 (1 dry), *Albatross* Sta. 4097, Pailolo Channel, between Maui and Molokai, Hawaii, 286 fms., July 22, 1902.

MCZ 367 (1 alcohol), *Albatross* Sta. 3828, south coast of Molokai, Hawaii, 319 fms., Apr. 1, 1902.

MCZ 368 (2 alcohol), *Albatross* Sta. 3867, Pailolo Channel, between Molokai and Maui, Hawaii, 284 fms., Apr. 10, 1902.

Stereocidaris sceptriferoides var. *lamellata* Mortensen

U.S. National Museum Bulletin 100, vol. 6, pt. 4, p. 304, pls. 71, 72; pl. 74, figs. 8-9; pl. 78, figs. 13-14, 1927.

Holotype:

USNM E1286 (dry), *Albatross* Sta. 5630, Patiente Strait, Philippines, 0°56'30"S., 128°05' E., 1,040 meters, Dec. 2, 1909.

Stereocidaris squamosa Mortensen

Videnskabelige Meddelelser fra den naturhistoriske Forening i Kjobenhavn, bd. 85, p. 70, 1928.

Syntype:

MCZ 4702 (1 dry), Saya de Malha, Indian Ocean, 150 fms.

Stereocidaris stylifera Mortensen

Videnskabelige Meddelelser fra den naturhistoriske Forening i Kjobenhavn, bd. 85, p. 69, 1928.

Holotype:

USNM E1301 (dry), *Albatross* Sta. 5392, Philippines, 12°12'N., 124°02'E., 247 meters, Mar. 13, 1909.

Stolonoclypus ravenelii A. Agassiz

Bulletin of the Museum of Comparative Zoology at Harvard, vol. 1, p. 265, 1869.

= *Clypeaster* (*Orathanthus*) *ravenelii* (Agassiz)--see Mortensen's Monograph of the Echinoidea, vol. 4, no. 2, p. 49.

Syntype:

MCZ 2178 (1 dry), off the Samboces, southeast of Key West, Florida, 34 fms., May 9, 1868.

Stolonoclypus rotundus A. Agassiz

Bulletin of the Museum of Comparative Zoology at Harvard, vol. 1, p. 25, 1863.

= *Clypeaster* (*Stolonoclypus*) *rotundus* (Agassiz)--see Mortensen's Monograph of the Echinoidea, vol. 4, no. 2, p. 109.

Holotype:

MCZ 2188 (dry), Acapulco, Mexico.

Strongylocentrotus armiger A. Agassiz

Bulletin of the Museum of Comparative Zoology at Harvard, vol. 3, p. 55, 1872.

= *Heliocidaris erythrogramma armigera*--see Mortensen's Monograph of the Echinoidea, vol. 3, no. 3, p. 350.

Syntype:

MCZ 1583 (dry), Tasmania (exact locality not known).

Strongylocentrotus echinoides A. Agassiz and H. L. Clark

Bulletin of the Museum of Comparative Zoology at Harvard, vol. 51, no. 5, p. 122, 1907.

Syntypes:

USNM 32760 (1 dry), *Albatross* Sta. 4894, off Simushir Island, Japan, 46°42'N., 151°47'E., 229 fms., June 24, 1906.

USNM 32753 (9 dry), *Albatross* Sta. 4777, Petrel Bank, Bering Sea, 51°11'N., 179°49'E., 43-52 fms., June 5, 1906.

USNM 32759 (1 dry), *Albatross* Sta. 5048, off Hakodate, Japan, 38°09'24"N., 141°52'30"E., 129 fms., Oct. 10, 1906.

USNM 31261 (3 alcohol), *Albatross* Sta. 4778, Petrel Bank, Bering Sea, 52°12'N., 179°52'E., 43 fms., June 5, 1906.

USNM 31239 (3 alcohol), *Albatross* Sta. 5049, off Hakodate, Japan, 38°12'N., 142°02'E., 128 fms., Oct. 10, 1906.

USNM 31238 (2 alcohol), *Albatross* Sta. 5041, south coast of Hokkaido, Japan, 42°16'30"N., 143°04'E., 61-140 fms., Oct. 3, 1906.

USNM 31237 (2 alcohol), *Albatross* Sta. 5016, off south end of Saghalin Island, Okhotsk Sea, 46°44'30"N., 143°45'E., 64 fms., Sept. 26, 1906.

USNM 31236 (1 alcohol), *Albatross* Sta. 4996, northwest of Hokkaido, Japan, 45°35'N., 149°55'E., 86 fms., Sept. 22, 1906.

USNM 31235 (1 alcohol), *Albatross* Sta. 4822, near Nanae, Hondo, Japan, 37°08'10"N., 137°08'E., 130 fms., July 21, 1906.

USNM 31234 (5 alcohol), *Albatross* Sta. 4792, off north point of Copper Island, Siberia, 54°36'15"N., 166°57'15"E., 72 fms., June 14, 1906.

USNM 31233 (6 alcohol), *Albatross* Sta. 4791, off north point of Copper Island, Siberia, 54°36'15"N., 166°58'15"E., 76 fms., June 14, 1906.

USNM 31232 (1 alcohol), *Albatross* Sta. 4790, off north point of Copper Island, Siberia, 54°38'45"N., 167°11'45"E., 64 fms., June 14, 1906.

USNM 31231 (2 alcohol), *Albatross* Sta. 4789, off north point of Copper Island, Siberia, 54°49'45"N., 167°12'30"E., 56 fms., June 14, 1906.

USNM 31230 (5 alcohol), *Albatross* Sta. 4987, west of Hokkaido, Japan, 43°19'20"N., 140°17'E., 59 fms., Sept. 20, 1906.

USNM 31229 (7 alcohol), *Albatross* Sta. 4796, off Starichkof Island, Siberia, 54°47'N., 158°43'E., 48 fms., June 20, 1906.

USNM 31228 (2 alcohol), *Albatross* Sta. 4795, off Starichkof Island, Siberia, 52°46'50"N., 158°44'30"E., 48-49 fms., June 20, 1906.

USNM 31227 (5 alcohol), *Albatross* Sta. 4788, off north point of Copper Island, Siberia, 54°50'24"N., 167°13'E., 57 fms., June 14, 1906.

USNM 31226 (10 alcohol), *Albatross* Sta. 4786, off north point of Copper Island, Siberia, 54°51'30"N., 167°15'E., 54 fms., June 14, 1906.

USNM 31225 (2 alcohol), *Albatross* Sta. 4784, off Attu Island, Alaska, 52°55'40"N., 173°26'E., 135 fms., June 11, 1906.

USNM 31224 (2 alcohol), *Albatross* Sta. 4782, off Attu Island, Alaska, 52°55'N., 173°27'E., 57-59 fms., June 9, 1906.

USNM 31223 (22 alcohol), *Albatross* Sta. 4779, Petrel Bank, Bering Sea, 52°11'N., 179°57'W., 54-56 fms., June 5, 1906.

USNM 31222 (3 alcohol), *Albatross* Sta. 4794, off Kamchatka, Alaska, 52°47'20"N., 158°44'30"E., 58 fms., June 20, 1906.

USNM 31221 (25 alcohol), *Albatross* Sta. 4777, see above.

MCZ 3972 (2 dry), *Albatross* Sta. 4784, see above.

MCZ 3973 (1 dry), *Albatross* Sta. 4795, see above.

MCZ 3974 (1 dry), *Albatross* Sta. 4819, between Hakodate and Solo Islands, Japan, 131-188 fms.

MCZ 3975 (1 dry), *Albatross* Sta. 4253, off Thistle Ledge, Stephen, Alaska, 131-188 fms.

MCZ 4043 (12 alcohol), *Albatross* Sta. 4787, see above.

MCZ 4049 (9 alcohol), *Albatross* Sta. 4993, between Hokkaido and Saghalin, 142 fms.

MCZ 4051 (4 alcohol), *Albatross* Sta. 4982, between Hokkaido, Japan, 390-428 fms.

Strongylocentrotus fragilis R. T. Jackson

Phylogeny of the Echini, p. 128, 1912.

= *Allocentrotus fragilis* (Jackson)--see Mortensen, 1942, p. 232.

Holotype:

MCZ 3668 (dry), Catalina Island, California.

Paratypes:

MCZ 3667 (5 dry), Catalina Island, California.

Strongylocentrotus polyacanthus A. Agassiz and H. L. Clark

Bulletin of the Museum of Comparative Zoology at Harvard, vol. 51, no. 5, p. 123, 1907.

Holotype:

USNM 32768 (dry), *Albatross*, Milne Bay, Simushir Island, Japan, June 23, 1906.

Strongylocentrotus pulchellus A. Agassiz and H. L. Clark

Bulletin of the Museum of Comparative Zoology at Harvard, vol. 51, no. 5, p. 124, 1907.

Lectotype (designated by Mortensen, Monograph, vol. 3, no. 3, p. 229):

USNM 32769 (dry), *Albatross* Sta. 5003, Gulf of Tartary, southwest of Saghalin Island, Okhotsk Sea, 46°29'30"N., 145°46'E., 35 fms., Sept. 23, 1906.

Syntype:

MCZ 3953 (1 dry), *Albatross* Sta. 4794, off eastern coast of Kamtchatka, 58-69 fms.

Stylocidaris annulosa Mortensen

U.S. National Museum Bulletin 100, vol. 6, pt. 4, p. 296, pl. 63, fig. 1; pl. 64, figs. 1-3; pl. 65, fig. 8; pl. 75, fig., 3; pl. 80, figs. 7-11, 1927.

Holotype:

USNM E1328 (dry), *Albatross* Sta. 5278, China Sea, near southern Luzon, 14°00'10"N., 120°17'15"E., 186 meters, July 17, 1908.

Paratypes:

USNM E1268 (1 dry), *Albatross* Sta. 5369, Marinduque Island, Philippines, 13°48'N., 121°43'E., 194 meters, Feb. 24, 1909.

USNM E1327 (6 dry), *Albatross* Sta. 5369, see above.

USNM E1329 (dry fragments), *Albatross* Sta. 5369, see above.

Stylocidaris effluens Mortensen

U.S. National Museum Bulletin 100, vol. 6, pt. 4, p. 285, pl. 62, figs. 1-2, 1927.

Syntypes:

USNM E1316 (4 dry), *Albatross* Sta. 5404, Leyte, Philippines, 10°50'N., 124°26'18"E., 347 meters, Mar. 17, 1909.

USNM E1264 (3 dry), *Albatross* Sta. 5403, between Leyte and Cebu, Philippines, 11°10'N., 124°17'15"E., 333 meters, Mar. 16, 1909.

USNM E1272 (21 dry), *Albatross* Sta. 5403, see above.

USNM E1273 (10 dry), *Albatross* Sta. 5536, between Negros and Siquijor, Philippines, 9°15'45"N., 123°22'E., 510 meters, Aug. 19, 1909.

USNM E1282 (2 alcohol), *Albatross* Sta. 5517, north Mindanao, Philippines, 8°45'30"N., 123°33'45"E., 309 meters, Aug. 9, 1909.

USNM E1294 (1 dry), *Albatross* Sta. 5516, northern Mindanao, Philippines, $8^{\circ}46'N.$, $123^{\circ}32'30''E.$, 319 meters, Aug. 9, 1909.

USNM E1295 (dry spines and pedicellariae from E1294), same as E1294.

USNM E1297 (6 dry), *Albatross* Sta. 5410, Leyte, Philippines, $10^{\circ}28'45''N.$, $124^{\circ}05'30''E.$, 704 meters, Mar. 18, 1909.

USNM E1298 (1 dry), *Albatross* Sta. 5416, between Cebu and Bohol, Philippines, $10^{\circ}11'30''N.$, $123^{\circ}53'30''E.$, 274 meters, Mar. 25, 1909.

USNM E1299 (3 dry), *Albatross* Sta. 5412, between Cebu and Bohol, Philippines, $10^{\circ}09'15''N.$, $123^{\circ}52'E.$, 296 meters, Mar. 23, 1909.

USNM E1300 (4 dry), *Albatross* Sta. 5415, between Cebu and Bohol, Philippines, $10^{\circ}07'50''N.$, $123^{\circ}57'E.$, 161 meters, Mar. 24, 1909.

USNM E1306 (1 dry), *Albatross* Sta. 5417, between Cebu and Bohol, Philippines, $10^{\circ}10'N.$, $123^{\circ}53'15''E.$, 302 meters, Mar. 25, 1909.

USNM E1313 (6 dry), *Albatross* Sta. 5418, between Cebu and Bohol, Philippines, $10^{\circ}08'50''N.$, $123^{\circ}52'30''E.$, 291 meters, Mar. 25, 1909.

USNM E1314 (1 dry), *Albatross* Sta. 5508, northern Mindanao, Philippines, $8^{\circ}17'24''N.$, $124^{\circ}11'42''E.$, 493 meters, Aug. 5, 1909.

USNM E1315 (4 dry), *Albatross* Sta. 5411, between Cebu and Bohol, Philippines, $10^{\circ}10'30''N.$, $123^{\circ}51'15''E.$, 265 meters, Mar. 23, 1909.

USNM E1319 (12 dry), *Albatross* Sta. 5402, between Leyte and Cebu, Philippines, $11^{\circ}11'45''N.$, $124^{\circ}15'45''E.$, 343 meters, Mar. 16, 1909.

USNM E1330 (2 dry), *Albatross* Sta. 5194, off northern Cebu, Philippines, $11^{\circ}15'30''N.$, $124^{\circ}11'E.$, 270 meters, Apr. 3, 1909.

Stylocidaris maculosa Mortensen

Videnskabelige Meddelelser fra den naturhistoriske Forening i Kjobenhavn, bd. 85, p. 72, 1928.

Paratype:

MCZ 4851 (1 dry), Sagami Sea, Japan, 100 fms.

Stylocidaris reini var. *cladothrix* Mortensen

U.S. National Museum Bulletin 100, vol. 6, pt. 4, p. 293, pl. 66, fig. 1; pl. 67, fig. 1, 1927.

Syntypes:

USNM E1332 (4 dry), *Albatross* Sta. 5392, between Samar and Masbate, Philippines, $12^{\circ}12'35''N.$, $124^{\circ}02'48''E.$, 247 meters, Mar. 13, 1909.

USNM E1378 (1 alcohol), *Albatross* Sta. 5398, between Masbate and Leyte, Philippines, $11^{\circ}35'12''N.$, $124^{\circ}13'48''E.$, 208 meters, Mar. 15, 1909.

USNM E1362 (dry fragments), *Albatross* Sta. 5212, east of Masbate, Philippines, 12°04'15"N., 124°04'36"E., 197 meters, Apr. 10, 1908.

USNM E1361 (6 dry), *Albatross* Sta. 5212, see above.

USNM E1367 (1 dry), *Albatross* Sta. 5212, see above.

Mortensen stated that lot E1332 includes the holotype, but he failed to specify which specimen.

Stylocidaris reini var. *rubida* Mortensen

U.S. National Museum Bulletin 100, vol. 6, pt. 4, p. 295, 1927.

Syntypes:

USNM E1377 (1 alcohol), *Albatross* Sta. 5398, between Masbate and Leyte, Philippines, 11°35'12"N., 124°13'48"E., 208 meters, Mar. 15, 1909.

USNM E1376 (1 alcohol), *Albatross* Sta. 5398, see above.

Temnopleurus australis H. L. Clark

Records of the South Australian Museum, vol. 3, p. 458, fig. 138, 1928.

= *Temnopleurus (Torematica) michaelsoni* (Doderlein)--see Mortensen's Monograph of the Echinoidea, vol. 3, no. 2, p. 105.

Paratypes:

MCZ 4951 (20 dry), South Australia (exact locality not known).

Temnopleurus japonicus von Martens

Archiv für Naturgeschichte, vol. 32-1, p. 133, 1866.

= *Temnopleurus hardwickii*--see Mortensen's Monograph of the Echinoidea, vol. 3, no. 2, p. 84.

Paratype:

USNM 17685 (1 dry), Yokohama, Japan.

Temnopleurus michaelsoni var. *viridis* H. L. Clark

Echinoderms from Australia, p. 380, 1938.

= *Temnopleurus (Torematica) michaelsoni*--see Mortensen's Monograph of the Echinoidea, vol. 3, no. 2, p. 106.

Holotype:

MCZ 7103 (dry), Western Australia (exact locality not known).

Paratypes:

MCZ 7104 (2 dry), Western Australia (exact locality not known).

Temnotrema notium H. L. Clark

Echinoderms from Australia, p. 387, pl. 26, fig. 5, 1938.

= *Temnopleurus (Torematica) michaelsoni*--see Mortensen's Monograph of the Echinoidea, vol. 3, no. 2, p. 105.

Paratype:

MCZ 7115 (1 dry), King Georges Sound, Albany, Western Australia.

Temnotrema sculptum A. Agassiz

Proceedings of the Academy of Natural Sciences, Philadelphia, p. 358, 1863.

Holotype:

MCZ 1492 (dry), Kagoshima Bay, Japan.

Thrichodiadema rodgersii A. Agassiz

Proceedings of the Academy of Natural Sciences, Philadelphia, p. 354, 1863.

= *Centrostephanus rodgersii* (Agassiz)--see Mortensen's Monograph of the Echinoidea, vol. 3, no. 1, p. 320.

Holotype:

MCZ 691 (dry), Port Jackson, New South Wales, W. Stimpson collection.

Toxobrissus pacificus A. Agassiz

Bulletin of the Museum of Comparative Zoology at Harvard, vol. 32, p. 83, pl. 11, figs. 4-5, 1898.

= *Brissopsis pacifica* (Agassiz)--see Mortensen's Monograph of the Echinoidea, vol. 5, no. 2, p. 420.

Syntypes:

MCZ 3063 (2 dry), Albatross Sta. 3355, off Panama, 7°12'20"N., 80°55'W., 182 fms.

Toxocidaris depressa A. Agassiz

Proceedings of the Academy of Natural Sciences, Philadelphia, p. 356, 1863.

= *Pseudocentrotus depressus* (Agassiz)--see Mortensen's Monograph of the Echinoidea, vol. 3, no. 2, p. 541.

Syntypes:

MCZ 1599 (2 dry), north end of Houshi Island, Japan.

Toxocidaris nuda A. Agassiz

Proceedings of the Academy of Natural Sciences, Philadelphia, p. 356, 1863.

= *Strongylocentrotus nudus* (Agassiz)--see Mortensen's Monograph of the Echinoidea, vol. 3, p. 232.

Syntypes:

MCZ 1745 (1 dry), Hilo, Hawaii, Stimpson collection.

MCZ 1747 (1 dry), northeast end of Nippon, Japan.

Toxocidaris franciscana A. Agassiz

Bulletin of the Museum of Comparative Zoology at Harvard, vol. 1, p. 22, 1863.

= *Strongylocentrotus franciscanus* (Agassiz)--see Mortensen's Monograph of the Echinoidea, vol. 3, no. 3, p. 242.

Syntype:

MCZ 1686 (1 dry), San Francisco, California.

Toxopneustes chloracanthus H. L. Clark

Memoirs of the Museum of Comparative Zoology at Harvard, vol. 34, no. 4, p. 283, 1912.

= *Toxopneustes pileolus*--see Mortensen's Monograph of the Echinoidea, vol. 3, no. 2, p. 473.

Holotype and Paratypes:

MCZ 1344 (3 dry), Samoa (largest is holotype).

Tretocidaris dubia H. L. Clark

Bulletin of the Museum of Comparative Zoology at Harvard, vol. 51, no. 7, p. 204, pl. 6, figs. 3-4, 1907.

= *Hesperocidaris dubia* (Clark)--see Mortensen's Monograph of the Echinoidea, vol. 1, p. 419.

Holotype:

USNM 27301 (dry), *Albatross* Sta. 3397, off Galera Point, Ecuador, 7°33'N., 78°34'20"W., 85 fms., Mar. 11, 1891.

Paratypes:

MCZ 160 (3 dry), *Albatross* Sta. 3397, see above.

MCZ 60 (1 alcohol), *Albatross* Sta. 3378.

Tretocidaris perplexa A. Agassiz and H. L. Clark

Memoirs of the Museum of Comparative Zoology at Harvard, vol. 34, no. 1, p. 205, pl. 6, figs. 1-2: pl. 7, figs. 1-4, 1907.

= *Hesperocidaris perplexa* (Agassiz and Clark)--see Mortensen's Monograph of the Echinoidea, vol. 1, p. 421.

Holotype:

MCZ 188 (dry), *Albatross* Sta. 2999, Gulf of California, 39 fms., Mar. 16, 1886.

Paratype:

MCZ 329 (1 dry), *Albatross*, Clarion Island, Mexico.

Trigonocidaris albida A. Agassiz

Bulletin of the Museum of Comparative Zoology at Harvard, vol. 1, p. 263, 1869.

Syntypes:

MCZ 1401 (1 dry), off Sand Key, Florida, 154 fms., Pourtales collection, 1869.

MCZ 1403 (1 dry), off Grenada, 129 fms., *Blake* Sta. 259.

MCZ 1407 (3 dry), off Sombrero Key, Florida, 123-125 fms.

MCZ 2884 (13 alcohol), off Sand Key, Florida, 119-138 fms., Pourtales collection.

MCZ 2885 (8 alcohol), off the Samboes, 123-125 fms.

MCZ 2887 (2 alcohol), off Conch Reef, Florida, 40 fms.

Urechinus giganteus A. Agassiz

Bulletin of the Museum of Comparative Zoology at Harvard, vol. 32, p. 79, pl. 8, figs. 7-8, 1898.

Syntype:

MCZ 2759 (1 dry), *Albatross* Sta. 3431, Gulf of California, 23°59'N., 108°40'W., 995 fms., 1891.

Urechinus naresianus A. Agassiz

Proceedings of the American Academy of Arts and Sciences, vol. 14, p. 207, 1879.

Syntype:

MCZ 2760 (7 dry), *Challenger* Sta. 146, between Prince Edward Island and Crozet Island, 46°46'S., 45°31'E., 1,375 fms.

Urechinus reticulatus H. L. Clark

Bulletin of the American Museum of Natural History, vol. 32, art. 8, p. 224, pl. 46, figs. 10-13, 1913.

Holotype:

USNM 31638 (dry), *Albatross* Sta. 5689, off Rosario Bay, west coast of Lower California, 29°23'N., 116°14'W., 879 fms., Apr. 24, 1911.

Xanthobrissus garretti A. Agassiz

Bulletin of the Museum of Comparative Zoology at Harvard, vol. 1, p. 28, 1863.

= *Metalia sternalis*--see Mortensen's Monograph of the Echinoidea, vol. 5, no. 2, p. 535.

Syntypes:

MCZ 3138 (4 dry), Gilbert Islands (exact locality not known).

MCZ 3270 (100 alcohol), same as 3138.

Zenocentrotus kellersi A. H. Clark

Proceedings of the U.S. National Museum, vol. 80, art. 5, p. 7, pls. 1-3; pl. 4, fig. 1; pl. 5, fig. 1; pl. 6, fig. 3, 1931.

Holotype:

USNM E2810 (dry), Niuaofu, October 6, 1930, collected by H. C. Kellers.

Paratypes:

USNM E2971 (1 dry), same as E2810.

USNM E2811 (1 dry), see above.

USNM E2970 (2 dry), see above.

MCZ 6003 (1 dry), see above.

Zenocentrotus paradoxus A. H. Clark

Proceedings of the U.S. National Museum, vol. 80, art. 5, p. 10, pl. 5, fig. 2; pl. 6, figs. 1-2; pl. 7, figs. 1-2, 1931.

Holotype:

USNM E2813 (dry), Niuafoou Island, September 1930, collected by
H. C. Kellers.

Paratypes:

USNM E2814 (4 dry), see above.

USNM E2815 (2 dry), see above.

USNM E2816 (2 dry), see above.

USNM E2817 (2 dry), see above.

USNM E2818 (1 dry), see above.

USNM E2941 (1 dry), see above.

MCZ 6004 (1 dry), see above.

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